

ttattcatat tgttttgatt accctcgtgt tactacaaga tggcaataaa tactatggga 480
ttgtttgtat taaaaaattt acattgcctc ttactattca gcagtagaaa ctttttacac 540
agtaacacca ttcgttgytg gtatttagtt ttctgaaggg tcgcagttgc cttgagcact 600
tggtattcgc agagcttgga cctgtagatt ttgaggcaga ttaggaattc tgcctgatgg 660
gtaagcttcc agtattggga ggtggagaag gggaggggtc agaaaaataa ataagagtta 720
ttgcactaac aaaagctctc atcacttgta gttctggatg ctggaatacc aragtttcta 780
acctaaatac kttgggtaca ttatttaatg gggctcmgtat tgctcmacmc yetcattgar 840
tcmctgtgag gtcttkgtga attttatcgc taagatcaga atgtgagaag tatttgata 900
tagggaaaga atgaagtgcc tttcaagtac attaaaaatc aagttaagag tttacaggaa 960
agagactgag attgg 975

<210> 497

<211> 2075

<212> DNA

<213> Homo sapiens

<400> 497

ttcaggggtgc cctcgggagc cctgtccctg ttgctgtggc ccctctcacg ccgccatcty 60
tytgcceccgc cccgcccctc cggcctcccc acacccccct tgccctcact acctgtatct 120
caccggcgtg tgttcaccct cccgggtggc tcacacactc tcattcacac acacaaatct 180
caggaacaaa cggctcccaga gtcctccgga cccctgccca gggctctctg aggtctctgc 240
cccacgcgtt cccgtcgtct acaaagccac cagctgcctc ctttaagctt ggtgctccgg 300
ctctgggcct ttcttgcgct ctattttttt tttttttttt ttaagaaaaa caacaacaac 360
aaaaaaagac aatgaaaaaa aaaacgtcat gtgagtgaag agatgtcact gtctgtggtc 420
ttggagaact agtctcgtag ctgaggggtg gggctccctc gtctggggca ctggcaccca 480
cagcaggact ccgccagtct gatgccagga ctgaataaag tgtatttgcc ccgaccttgc 540
cctgtggttc tgcattgtct tgctcttccct caaccctccc taaacagttt gccagattca 600
agtccgtgtg atttgggccc gagctgggtg tcccagggca agccaccttg cctgtctagg 660
cctctatgtc aggactccct ggccttcctg aagaatagca aactcatccc tgtagggacc 720
aggcaggtaa catagacgag tgactctggg tggacagtgg tgtcatgacc cacttcaagg 780
ggcctacctc ctgccagttg tgaccctgtg gaatgcagtc cacagtggcc aggtggccag 840
atttttcaag aaaagctgga tggatgtttc tgagtcattc taatttcaaa atgagactca 900
tattttaaaa tttctgtggg ccaaataaaa caagtatgca ggcaggtctg gtccgagggg 960
gctggccttg catgcctttc tgtgccttta atgaggacta agaagcaaga ttggggcaca 1020
ctgtctggac tcaaagccca gctccaccac tgagcaccg tgtgactctt tccatattga 1080
taacgtggg ataataataa tagctgcttc acaggatgaa atgaagtttg aggtgagaag 1140
cattcaccat ggtgcccatc gtgttactcc attgtcagag gaggaacg ggtcaggcag 1200
gaaagcaact taaaggaggg cctgcaagca gccaggggtc gagacagggc ttggttctgc 1260
ttcctggtga agcatggctt cgggggtgct cctctccctc cctgtttgaa tctgcagatt 1320
gtgttaggcc cccagctgag ggcctggagt ggtgggattg gtcccagtgc ctggcgacac 1380
ttggcctgca gtagatatta actgaatgac caaagagcaa cagaagtcta gtgattcttg 1440
tctttgargt tctgactggt gttttacaac tgagtccaag gcttttccct cctttgtccc 1500
tctgacaccc ctccccctaa ttctcatctg tcagatccag tgtattccta agctgggaca 1560
aarcctctgt ttcccagta ggagccaggg ctgagtgtgg aaattacagt gactgcttct 1620
tctcagcttc tctggttgaa agcaagctgg cgaagtaaga ggaggtagag ttgagaaggt 1680
gtggaagata gggacagctg ccccagaac tcccttcaag ggaggacttc cccagctatg 1740
ggaagtgcc tcaagggtgg cgcagctgca gagagccact tcacctgaga ccacgcctt 1800
cctggggcag cctgtatctg gtgtctgagt gaggcattgg ataaacacct ggtcatttca 1860
atccaacatg ggacggacac tgacagacag tactcccagc agggccaggc cagccagggc 1920
ttcgtcaggc ctgcagcaca atttgacttc ctatgccag gcctgcttcc tcttcttcc 1980
cttcttttca cagggtgctta ttcctaataa acatcttgca acccaaactc agtctcattg 2040

tctgttttcta gagaaaccca gtctacaaca gaggg

2075

<210> 498

<211> 1904

<212> DNA

<213> Homo sapiens

<400> 498

gctaagctgc agtgatgttg cctatatatta aatttttctca aatggccaag ctctgatggg 60
ctacttttatt tgagcaatag ttgagactta attgcctata aataaaciaa caaatgamct 120
atgtgttttt ttttctcaca acatctggcc tatattgtct gtcaggargc catgggtcca 180
atgtaaagta catagtctct acatactttc aactgcagct ggtccctgac ctcaccaggt 240
wtcagagatg ttctwaaagg aagccagctg tggcagggtca cagattcatg ggaaatggaa 300
agaaccaagg aatatagctc ttgcctcacc tttctaccca ctgcagatat agttcaagcc 360
agagtaatgg aagaacttaa cttactagcc tctcaggctg ctctatccc tacctcccag 420
tgtacagccc ctccccatct ctttagtccc ctttccctca cttccccttt tataatgtca 480
cacaaatcag ggacagtagg atcacattat aacctacttt gtcataggga ttcgattttt 540
cttatatcaa atcatgtttc ctgaaaccca gctggggcat atgcactcaa tgtctaatac 600
atacttatta atgtaccgga tattggcctt gccctggat atcagcaata tattataaaa 660
ggttccagta gatgagacga ttgagtctga atacaattgc agtaaattgt gccaataaag 720
atattgtact gttacggtct tagagttaaa gccgcttgaa tgcagcatgc acattcatgt 780
aaacagacaa tcagggttagg cctagaataa ccacaaaaat tctattggcc ttactgcagc 840
cacctatatg tagaacaatg gaggagatag tttgtggtcc attattgtac cctgtttcat 900
ccattagcat cagaatctct ctttcaggtc atttattaaa tatgattgaa atgtttaaaa 960
gttctgaac atgattcatg atgattaaaa tatcatataa ctgataaaaag actttaagaa 1020
ctttatatat ttctgtgtgc ctcaaaatgt aacagaaatt attcttagag ctttgatttt 1080
agctatccta attactgcaa ataaatattt gttcttatag ttttaaatca aaaagaaaag 1140
tcttggtata aaaccttaag cttgaaatca tattaataaa atrtattgta catagtggaa 1200
aattttcagt agctaattta aaatttcaga aaatgctatt aaagaatttt gattcaagta 1260
tttaaactgt ttagttatgc atgcttctta ttaaccgaaa atgataatac catttagttt 1320
agtgatcagt atgagaagca atacctaatc ctatgttgct attgtatttt ttcctagttg 1380
gtgtgcctgc tcagaaaaac atatactgta tgtgtataca tacctgtgta tatataaaag 1440
gtcaatttat atatttttct ataggaaaat ggagtaacaa gttccctatc tcccatattt 1500
atgtgtccat agtaaaatgg ccacattgat gataatttct agaactagtt tctgagattg 1560
tcagcccttt gtctaaaata atggcagtat taatgattga cttctgtcac tgccatagtt 1620
acctggattg tcagccttgg tagcctttgt ctaaagtcct aaagagttcc aaaaaaaatg 1680
tgttgaaatt taattgctaa atagtgttg gtgattcttt acagtaggaa ttgtaataat 1740
tttcttgcaa ataagttatt tactgtatt gatattgaat aattgtctt ttattcagat 1800
atatttcaaa aagcatgaat atatgattat tcataaattg tatactttac cagtaagttt 1860
tcagaggaaa taaagacttt taaatccttt tcaaaaaaaa aaaa 1904

<210> 499

<211> 2871

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (267)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1642)

<223> n equals a,t,g, or c

<400> 499

```
ttttttgttg tttgtttgtt tgtttgttta aaaaacgggg tctcactttg ttgccaggct 60
gatctcaaac tcttggaact aagtgatcct cccgcctggg cctcccaaag tgctaggatt 120
acaggtgtga gccacagagc tcggccaaag aataaaagaa tggctactcc atgggcagag 180
cagcctcttg atttttatgt atgttgatat aagcaaatta tctggaattt atctgctata 240
ctgataaaaa tcagtaaacc ttgttantgt cagcatctaa tctgtattaa acttttactt 300
atttcccttt actttttaga ttcaaagaga rggttcacac agatatcttt catgctacat 360
tattgagctt aaggaagata aatttcccaa atatgatatt tggatatatt gtgtgtctgt 420
aatttttttt ttaatttaat gctgtattta atttgtaagt cctgccattg actctaccag 480
aggagattct tcaagcttag ttgctgaact tcaagaaaag cttcaggaag aaaaagctaa 540
gtttctagaa caactgaag agcaagaaaa aagaaagaat gaagaaatgc aaaatgttcg 600
aacatctttg attgcggaac aacagaccaa ttttaacact gttttaacaa gagagaaaat 660
gagaaaagaa aacataataa atgatcttag tgataagttg aaaagtacaa tgcagcaaca 720
agaacgggat aaagatttga tagagtcact ttctgaagat cgagctcgtt tgcttgagga 780
aaagaaaaag cttgaagaag aagtcagtaa gttgcgtagt agcagttttg ttccttcacc 840
atatgtagct acagcccag aactttatgg agcttgtagc cctgaactcc caggtgatac 900
agatagatcc gctgtggaaa cagcagatga aggaagagtg gattcagcaa tggagacaag 960
catgatgtct gtacaagaaa atattcatat gttgtctgaa gaaaaacagc ggataatgct 1020
gttagaacga acattgcaat tgaagaaga agaaaataaa cggttaaatc aaagactgat 1080
gtctcagagc atgtcttcag tatcttcaag gcattctgaa aagatagcta ttagagattt 1140
tcaggtggga gatttggtac tcatcatcct agacgaacgc catgacaatt atgtgttatt 1200
tactgttagt cctactttat attttctaca ttcagagtct ctacctgccc tggatctcaa 1260
accaggtgag ggtgcttcag gtgcatctag aagaccctgg gtacttgga aagtaatgga 1320
aaaagaatac tgtcaagcca aaaaggcaca aaacagattt aaagttcctt tggggacaaa 1380
gttttacaga gtgaaagccg tatcatggaa taagaaagta taacttatgg acaaaaattaa 1440
tacattctat gacatttttt tctgatttgt cctgcagtgc tcattcatca ctccaaaaac 1500
agcaggccat ctttttatgc aaaagtcagc gtgacaatat acttactagg tgtacatcgt 1560
ttacttttta actggcttca ttttaggaat aataaattca tcagaatcct tggctgaatt 1620
aaaatggttt ttgttttttt gntttttttt tttaccaga caactctaga aatgctggacc 1680
aaactacttc attttctcaa agggcatacc ttgtgcattg tggcttatga tgagccatat 1740
taattgcctg ttaaatatac actagcttga acttagatgt taaatgttat tattaccagc 1800
atgtgcctt ttgtgaaatc agtatcagaa tacttgcaact cttaacaca ttctttataa 1860
aatgtataaa ttattcagaa ctatttaaaa taaagaggag tggtattgca tgctgataat 1920
cattttgagt ttgcctcagt agatactaaa gcaaatgttt tcagtttttt taaatgccct 1980
ttgatgtttc aaaaaaaaaa aggaactgta atttgattga ctgattttta gatcagccat 2040
aagtaatcag caatcttcaa agcacttttc agtggatttg tcatctgggt tctaaagga 2100
agagtctgtg ctactaacca tttcaaagtc agactcaaac cttcccaaca tctttatgac 2160
tctagaataa tcatattgat gaaatcgtaa ttcattggtg agtttcagaa caaaagatat 2220
tcattgcaca ttaaccattt agaggtcatt taaataacaa aatattgtat tgtaaaagaa 2280
ctgtacaatt ttaaaacaat aaagatttga acctgtaaat gtgtgtgcct tttaaagaag 2340
gatacatttt taatatattt gagtgtatgc tgggaagtgt gaaaatattg ttatgtatca 2400
tatcaaagag aaacatgttt attacaaaaa tgttctttta ctatatacta tgtaacaggg 2460
taaacagtgt tatgtagaat agaattgtgt aaactagatc tttagagaag ttgccattga 2520
gcaaagttat ttaaatgagt tagttgagtt ggatgagaat tgtttgaggt ttgttgctag 2580
agaacaataa taaaataatt ctttttcaga aaatatttaa tttcttcata aaaataagtt 2640
aaatattttt ttaaatatgt atatctaata gtacaaaatg gaataaacat catagtgtat 2700
```

agaaaaactga atttgacaag ttaatgaata aatgaacaaa tgatttcaca tgtttctatt 2760
taatctttcc atgacatctt tatgcaaaga ctgttaaagc aataacttta tatagagggt 2820
gattttgtta agcagatctg gttaggtgta aatatrccat tccaggtagg t 2871

<210> 500

<211> 1624

<212> DNA

<213> Homo sapiens

<400> 500

tgtatcagga gccggccctt ttttggaac aggccagcat tcagtctcca cagaggcacc 60
ataaacacgc tgggtggggcc ctgtactgtg gtcaaagtca aggcctccgg gcaggactcg 120
cggcccctcc ggctggcggg tggggttgac ccgcacgtcc cgccecgctt ctccctccgc 180
gctccggacg ggcgacggtg gctcgagacc cgggactccg cccgcctccc cgcgagtatt 240
tgagggtccg ggcggtcccg gcgcctctgc ccgcctgtct gctcgctcgc tccccgctct 300
ggagtctgcc atcatggatg ttctcgaga agcaaatggc acctttgcct taaacctttt 360
gaaaacrtg ggtaaagaca actcgaagaa tgtgtttttc tcacccatga gcatgtcctg 420
tgccctggcc atggtctaca tgggggcaaa gggaaacacc gctgcacaga tggcccagat 480
actttctttc aataaaagtg gcggtggtgg agacatccac cagggtctcc agtctcttct 540
caccgaagtg aacaagactg gcacgcagta cttgcttagg atggccaaca ggctcttttg 600
ggaaaagtct tgtgatttcc tctcatcttt tagagattcc tgccaaaaat tctaccaagc 660
agagatggag gagcttgact ttatcagcgc cgtagagaag tccagaaaac acataaacac 720
ctgggtagct gaaaagacag aaggtaaaat tgcggagtgt ctctctccgg gctcagtggg 780
tccattgaca aggctggttc tggatgaatgc tgtctatttc agaggaaact gggatgaaca 840
gtttgacaag gagaacaccg aggagagact gtttaaagtc agcaagaatg aggagaaacc 900
tgtgcaaatg atgtttaagc aatctacttt taagaagacc tatataggag aaatatttac 960
ccaaatcttg gtgcttccat atgttggaac ggaactgaat atgatcatca tgcttccgga 1020
cgagaccact gacttgagaa cgggtggagaa agaactcact tacgagaagt tcgtagaatg 1080
gacgaggctg gacatgatgg atgaagagga ggtggaagtg tccctcccgc ggtttaaact 1140
agaggaaagc tacgacatgg agagtgtcct gcgcaacctg ggcagtactg atgccttcga 1200
gctgggcaag gcagacttct ctggaatgtc ccagacagac ctgtctctgt ccaaggctcg 1260
gcacaagtct tttgtggagg tcaatgagga aggcacggag gctgcagccg ccacagctgc 1320
catcatgatg atgcggtgtg ccagattcgt cccccgcttc tgcgcgacc accccttctt 1380
tttcttcatc cagcacagca agaccaacgg gattctcttc tgcggccgct tttctcttcc 1440
gtgaggacag ggcaagtctt gtgtgcagcc cctctctctt ctgtcccctg acactccaca 1500
gtgtgcctgc aacccaagtg gccttatccg tgcagtgggt gcagttcaga aataaagggc 1560
ccatttgtgg gatgccgcaa aaaaaaaaaa aaaaaawaa waaaaaaaaa aaaaaaaaaa 1620
aaaa 1624

<210> 501

<211> 848

<212> DNA

<213> Homo sapiens

<400> 501

gtgatactcc tgttgcagga ccatttgaag tctgagagtt tccaggtgtc tggaaatgaa 60
gaagatgttc aagctgaaag agtccaagca gcaaatgcac tcactactcc aaacttggag 120
gaggaaccag tcataactgc aagctgttta cacaaggaat attatgagac aaagaaagt 180
gcttttcaac aacaaagaag aaagcagcca tcagaaatgt ttcgttttgt gttaaaaagt 240
gaaagtttgg gattactagg acacaatgga gctggyaaaa gtacttccat taaaatgata 300
actgggtgca carwgccaac tgcaggagtg gtggtgttac aaggcarcag agcatcagta 360

aggcaacagc gtgacaacag cctcaagttc ttgggtactg ccctcaggag aactcactgt 420
gtcccaaact tacaatgaaa gagcatttgg agttgtatgc agccgtgaaa ggactgggca 480
aagatgctgc tcttagtatt tcatgattgg tggaaagctct caagctccag gagcaactta 540
aggctcccgt gaaaactcta tcagaggga taaagagaaa gctatgcttc gtgctgagca 600
tactggggaa cccatcagtg gtgcttctag acgagctgtt caccgggatg gaccctgagg 660
ggcagcagca aatgtggcag atacttcagg ctaccattaa aaaccaggag agggggcgccc 720
tcttgaccac ccattacatg tcagaggcta agtctctgtg tgaccgtgtg gccatcatgg 780
tgtcaggaac gctaaggtgt attggttcca ttcaacagct gaaaagtttg gtaaagatta 840
tttactag 848

<210> 502

<211> 3192

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3085)

<223> n equals a,t,g, or c

<400> 502

gagcagaaca ttggggggcg attccccag caggagggtg agcagttgga atttcggaga 60
ctttcttggg gaagaaggtg .agaacaaaga ccctatcgga agacgacytg aaggagatcc 120
cagccgagca gatggatttc cgtgccaaacc tgcagcggca agtgaagcca aagactgtgt 180
ctgaggaaga gaggaaggtg cacagccccc agcaggtcga ttttcgctct gtcctggcca 240
agaaggggac ttccaagacc cccgtgcctg agaaggtgcc accgccaaaa cctgccaccc 300
cggatttttcg ctccagtgtg ggtggcaaga agaaattacc agcagagaat ggagcagca 360
gtgccgagac cctgaatgcc aaggcagtg agagttccaa gcccctgagc aatgcacagc 420
cttcaggggcc cttgaaaccc gtgggcaacg ccaagcctgc tgagaccctg aagccaatgg 480
gcaacgccaa gcctgccgag accctgaagc ccatgggcaa tgccaagcct gatgagaacc 540
tgaaatccgc tagcaaagaa gaactcaaga aagacgttaa gaatgatgtg aactgcaaga 600
gaggccatgc agggaccaca gataatgaaa agagatcaga gagccagggg acagccccag 660
ccttcaagca gaagctgcaa gatgttcattg tggcagaggg caagaagctg ctgctccagt 720
gccaggtgtc ttctgacccc ccagccacca tcatctggac gctgaatgga aagaccctca 780
agaccaccaa gtccatcatc ctctcccagg aaggctcact ctgctccgtc tccatcgaga 840
aggcactgcc tgaggacaga ggcttatata agtktgtagc caagawtgac gctggccagg 900
cggagtgtct ctgccaaagtc actgtggatg atgctccagc cagtgagaac accaaggccc 960
cagagatgaa atcccggagg cccaagagct ctcttcctcc cgtgctagga actgagagtg 1020
atgcgactgt gaaaaagaaa cctgccccca agacacctcc gaaggcagca atgccccctc 1080
agatcatcca gtccctgag gaccagaagg tacgcgcagg agagtcagtg gagctgtttg 1140
gcaaagtgc aggcactcag cccatcacct gtacctggat gaagttccga aagcagatcc 1200
aggaaagcga gcacatgaag gtggagaaca gcgagaatgg cagcaagctc accatcctgg 1260
ccgcgcgcca ggagcactgc ggctgtaca cactgtggt ggagaacaag ctgggcagca 1320
ggcaggccca ggtcaacctc actgtctgtg ataagccaga cccccagct ggacacctt 1380
gtgcctctga cattcggagc tcctcactga ccctgtcctg gtatggctcc tcatatgatg 1440
ggggcagtgc tgtacagtcc tacagcatcg agatctggga ctacgccaac aagacgtgga 1500
aggaactagc cacatgccgc agcacctctt tcaacgtcca ggacctgtg cctgaccayg 1560
aatataagtt ccgtgtacgt gcaatcaacg tgtatggaac cagtgaagca agccaggagt 1620
ctgaactcac aacggttagga gagaaacctg aagagccgaa ggatgaagtg gaggtgtcag 1680
aygatgatga gaaggagccc gaggttgatt accggacagt gacaatcaat actgaacaaa 1740
aagtatctga cttctacgac attgaggaga gattaggatc tgggaaattt ggacaggtct 1800

ttcgacttgt agaaaagaaa actcgaaaag tctgggcagg gaagttcttc aaggcatatt 1860
cagcaaaaga gaaagagaat atccggcagg agattagcat catgaactgc ctccaccacc 1920
ctaagctggg ccagtgtgtg gatgcctttg aagaaaaggc caacatcgtc atggctcctgg 1980
agatcgtgtc aggaggggag ctgtttgagc gcatcattga cgaggacttt gagctgacgg 2040
agcgtgagts catcaagtac atgcggcaga tctcggaggg agtggagtag atccacaagc 2100
agggcatcgt gcacctggac ctcaagccgg agaacatcat gtgtgtcaac aagacgggca 2160
ccaggatcaa gctcatcgac tttggtctgg ccaggaggct ggagaacgcg gggctctctga 2220
aggtcctctt tggcacccca gaatttggg ctccctgaagt gatcaactat gagcccatcg 2280
gctacgccac agacatgtgg agcatcgggg tcatctgcta catcctagtc agtggccttt 2340
cccccttcat gggagacaac gataacgaaa ccttggccaa cgttacctca gccacctggg 2400
acttcgacga cgaggcattc gatgagatct ccgacgatgc caaggatttc atcagcaatc 2460
tgctgaagaa agatatgaaa aaccgcctgg actgcacgca tgctttcagc atccatggct 2520
aatgaaagat accaagaaca tggaggccaa gaaactctcc aaggaccgga tgaagaagta 2580
catggcaaga aggaaatggc agaaaacggg caatgctgtg agagccattg gaagactgtc 2640
ctctatggca atgatctcag ggctcagtgg caggaaatcc tcaacagggt caccaaccag 2700
cccgtcaat gcagaaaaac tagaatctga agaagatgtg tcccaagctt tccttgaggc 2760
tgttgcctgag gaaaagcctc atgtaaaacc ctatttctct aagaccattc gcgatttaga 2820
agttgtggag ggaagtgtct ctagatttga ctgcaagatt gaaggatacc cagaccccgga 2880
ggttgtcttg ttcaaagatg accagtcaat caggaggtcc cgccacttcc agatagacta 2940
cgatgaggac gggaactgct ctttaattat tagtgatgtt tgcgggggatg acgatgccaa 3000
gtacacctgc aaggctgtca acagtcttgg agaagccacc tgcacagcag agctcattgt 3060
ggaaaacgat gaggaagggt aaggngaagg ggaagaggaa gaagagtga acaaagccag 3120
agaaaagcag tttctaagtc atattaaaag gactatttct ctaaaactca aaaaaaaaaa 3180
aaaagggcgg cc 3192

<210> 503

<211> 683

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (622)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (626)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (648)

<223> n equals a,t,g, or c

<400> 503

tttggcgcgt ctctgccggg cctatccggc tccatccaac ctctgaccgt ctgcgggggg 60
ccgcagttcg tccccgcggc tacggcggtg tgctcccgac cctgcaggcg gctggatgtt 120
ggggcgagsg gcaagatggc agaagtagag cagaagaaga agcggacctt ccgcaagtgc 180
acctaccgcg gcgtggacct cgaccagctg ctggacatgt cctacgagca gctgatgcag 240
ctgtacagtg cgcgccaggc ggcggctgaa ccggggcctg cggcggaagc agcactccct 300

gctgaagcgc ctgcgcaagg ccaagaagga ggcgccgccc atggagaagc cggaagtggg 360
gaagacgcac ctgcgggaca tgatcatcct acccgagatg gtgggcagca tgggtgggcgt 420
ctacaacggc aagaccttca accaggtgga gatcaagccc gagatgatcg gccactacct 480
gggcgagttc tccatcacct acaagcccgt aaagcatggc cggcccggca tcggggccac 540
ccactcctcc cgcttcatcc ctctcaagta atggctcagc taataaaggc gcacatgact 600
ccaaaaaaaa aaaaaaaaaa angggnsggc ccggtcttaa aggatccnaa gcywacktac 660
sctgctgcaa ctctactctc tcc 683

<210> 504

<211> 2196

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2104)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2148)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2196)

<223> n equals a,t,g, or c

<400> 504

tcgacccacg cgctccgnag ttaacctttt gcctaaactt ggagagctca tacatactat 60
gtgttagggg tacagaagct tttcctcata gggcatgagc tctccaagag ttaacctttt 120
gcctaaactt ggggtttctg tggttcataa agttgggata trtwtttttt ttcaaagtga 180
agaaaatccg tatttggcaa gaagactcca ggggatgata ctgtccttgc cacttacagt 240
ccaaagattt tcccaaaga atagacattt tttcctctca tcaattctag atgcaaaatc 300
ttttattttt ttcttttctc acacacaccc cagacccta acgttaagcc agcttccatc 360
tccccattcc acacgatctt gagtagcaca cgttatgktc gkttcctccg aagaktgttg 420
tattwgggtc tgaragscag aggggctkcg aaagacttgt tatagtccgt ktgggaatga 480
gagaagtcgg tgcagawtag taaacgggag tctgtttccc acaggtcccc tccccctgag 540
ccatctaca atagcgaggg gaagcggctt aacacccgag agttccgcac ccgcaaaaag 600
ctggaagagg agcggcacaa cctcatcaca gagatgggtg cactcaatcc ggatttcaag 660
ccacctgcag attacaaacc tccagcaaca cgtgtgagtg ataaagtcag gattccacaa 720
gatgagtacc cagaaatcaa ctttgtgggg ctgctcatcg ggcccagagg gaacaccctg 780
aagaacatag agaaggagtg caatgccaaag attatgatcc gggggaaaagg gtctgtgaaa 840
gaagggaagg ttgggcgcaa agatggccag atgttgccag gagaagatga gccacttcat 900
gccctggtta ctgccaatc aatggagaac gtcaaaaagg cagtggaaac gataagaaac 960
atcctgaagc aggggtatcga gactccagag gaccagaatg atctacggaa gatgcagctt 1020

cgaggagttgg ctcgcttaaa tgggaccctt cgggaagacg ataacaggat cttagaccc 1080
tggcagagct cagagacccg cagcattacc aacaccacag tgtgtaccaa gtgtggagg 1140
gctggccaca ttgcttcaga ctgtaaattc caaaggcctg gtgatcctca gtcagctcag 1200
gataaagcac ggatggataa agaataattt tccctcatgg ctgaactggg tgaagcacct 1260
gtcccagcat ctgtgggctc cacctctggg cctgccacca caccctggc cagcgcacct 1320
cgtcctgctg ctcccgccaa caaccacct ccaccgtctc tcatgtctac caccagagc 1380
cgccaccct ggatgaattc tggcccttca gagagtcggc cctaccacgg catgcatgga 1440
ggtggtcctg gtgggcccg aggtggcccc cacagcttcc cacaccatt acccagcctg 1500
acaggtgggc atggtggaca tcccatgcag cacaacccca atggacccc acccccttg 1560
atgcagccac caccaccac gatgaaccag ggccccacc ctcctgggca ccatggccct 1620
cctccaatgg atcagtacct gggaaagtac cctgtgggct ctggggtcta tcgcctgcat 1680
caaggaaaag gtatgatgcc gccaccacct atgggcatga tgccgccgcc gccgccgct 1740
cccagtgggc agccccacc cctccctctt ggtcctcttc ccccatggca acaacagcag 1800
cagcagctc cgccamccc tccgcccagc agcagtatgg cttccagtac ccccttgcca 1860
tggcagcaaa atacgacgac taccaccacg agcgctggcw cagggtccat cccgccatgg 1920
caacagcagc aggcggctgc cgcagcttct ccaggagccc ctcagatgca aggcaacccc 1980
actmtgggcm ccattggccct cctccaatgg atcagtacct gggaaagtac cctgtgggct 2040
ctggggtcta tcgcctgcat caaggaaaag gtatgatgcc gccaccacct atgggcatga 2100
tgtngccgcc gccgccgct tcccagtggg ggccctggga aatgtgcntg gaaggcttga 2160
ttcagcgggg ccgggggttg gcggcgccg ggcgcn 2196

<210> 505

<211> 949

<212> DNA

<213> Homo sapiens

<400> 505

cccaccccc cgcctccgc ctaccacgc atccccctc atcctcctcc aggggttgggc 60
ctgccgccag ccagctaccc acctcctgcc gtccccctg gaggacagcc tcctgtgccc 120
ccgcccattc ccccaccgg catgcctcca gttggggggc tggggcgggc agcctggcat 180
gagataacgt gagccttttt tccctctttg tttttttaac aagattttct aatcgacttg 240
cagagtagtt gaagtgggta agcagcaggg taccttgat aatgcacgac agttgcagta 300
tgggaagaat ggaccgggcc cctgggataa aatcagagtg gtcctcacac ctagaggacg 360
gggacaacca gctttcagag tagcctcatc agtgcccttg cagtctgact gtgtacactt 420
ggttcagcta atgtctgaga gtccctgact gggttacttt atactagtga ggacgttaac 480
cagccatatt ggctcaataa atagcttcgg taaggagtta atttccttct agaaatcagt 540
gcctattttt cctggaaact caattttaaa tagtccaatt ccactgaag ccaagctggt 600
gtcattttca ttcggtgaca ttctctcca tgacaccag aaggggcaga agaaccacat 660
ttttcattta tagatgtttg catcctttgt attaaaatta ttttgaagg gttgcctcat 720
tggatggcct ttttttttct ctccaggagg aaggggagaa atgtacttg aaattaatgt 780
atgtttacat ctctttgcaa attcctgtac atagagatat attttttaag tgtgaatgta 840
acaacatact gtgaattcca tcttggttac aaatgagact ccttcagtca gttatccaaa 900
taaaagcagt tctgaaacta aaaaaaaaa aaaaaaaaa aaaaaaaaa 949

<210> 506

<211> 365

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (359)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (361)
<223> n equals a,t,g, or c

<400> 506
cagccgcgcg agactttctg gcaggcgcgtg caactgtgtt acttcatcca gttgattttg 60
cagatcgaat ctaacggtca ctcaagtatcg tttggtcgta tggaccagta tctctacccg 120
tactatcgcc gcgacgttga actcaaccag acgctggatc gcgaacacgc catcgagatg 180
tgcatagctg ctggctgaaa ctgctggaag tgaacaagat ccgytccggc tcacactcaa 240
aagcctctgc gggaagtccg ccatgttctt cgagatatc ggtacccaat tcgccctata 300
gtgagtcgta ttacaattca ctggccgctg ttttacaacg tcgtgactgg gaaaacgann 360
nagga 365

<210> 507
<211> 2059
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c

<400> 507
gtggtnangc tccagaanta gtggatccgg aggctgcaga atggcccag agggccgagg 60
cgtagtgagg gtgactcctc cgttccttgg gtcccgtcgt ctgtgatact gcagygcagc 120
catggcagaa ccgcagcccc cgtccggcgg cctcacggac gagggccgcc tcagtgtctg 180
ctccgacgcg gaccccagta ccaaggattt tctattgcag cagaccatgc tacgagtga 240
ggatcctaag aagtcactgg atttttatac tagagttctt ggaatgacgc taatccaaaa 300
atgtgatttt cccattatga agttttcact ctacttcttg gcttatgagg ataaaaatga 360
catccctaaa gaaaaagatg aaaaaatagc ctgggcgctc tccagaaaag ctacacttga 420
gctgacacac aattggggca ctgaagatga tgmgaaccag agttaccaca atggcaattc 480

agaccctcga ggattcgggc atattggaat tgctgttcct gatgtatata gtgcttgtaa 540
aaggtttgaa gaactgggag tcaaatttgt gaagaaacct gatgatggta aaatgaaagg 600
cctggcattt attcaagatc ctgatggcta ctggattgaa attttgaatc ctaacaaaat 660
ggcaacctta atgtagtgct gtgagaattc tcctttgaga tttcagaaga aaggaaacaa 720
tgtgattcaa gatatttaca taccagaagc atctaggact gatggatcac tgtcccgatt 780
caaattattc ttcagtcctt tcccccttcc tatttcagct gtcccttttc acctaaactgt 840
tcagtcattc tggttttcaa gcagtgcttt atctcatgtc cttgaatata gttgtgtaac 900
tttatttttt aggtaataat tagaacagtt cccttcagag gctgcatttg ccttcttctg 960
ccacctaaat attacttccc ttcaaactctg cctttgaatc atcattttta aaaaaaatt 1020
aacatgtttt tggtgtagtt atcttctggg gtttcaattc ctcagaaaca acttttttca 1080
caacggaaag gaaagaacac tagtggtcct tcagtaaagt acaaagtgtt tatttttcaa 1140
aagagtaggt actcttgaga gcaattcaaa tcatgctgac aaggatactg atagaaaaag 1200
tgatttcttc ttattataaa gtacatttaa agttcaagga ctaaccttat ttatttgga 1260
aaggggagga ggaaggaaat gatatggtac ccagacactg ggctaggctg caactttatc 1320
tcattttaata tccccagctg tcatgtgaga aagaaagcag gctaggcatg tgaaatcact 1380
ttcatggatt attaatggat ttaagagggc atcaatcagc tcaactcaag atttcataat 1440
catttttagt atttagattg tgccctcaaag ttgtagtacc tcacaatacc tccactggtt 1500
tcctgttgta aaaaccttca gtgagtttga ccattgtgct cttggctctt gggctggagt 1560
accgtgggtg gggagtaaac actagaagtc tttagtacaa aactgctcta gggacacctg 1620
gtgattccta cacaagtgat gtttatattt ctcataaaga gtcttcccta tcccaaggtc 1680
ttcatgatgc cagtagccat atatgataaa ttatgttcag tgataactta gttatcagaa 1740
atcagctcag tggcttctcc cgccatgatt cacatttgat gagtttttaa aaatcaaagt 1800
gattttgaaa atctctaagt gctcagaaaa taaaaacatc cagtttgttg atgactatat 1860
ttagatttct ctagactcta gtggaagacc tttggaaagg ccatgccaac cgtgcttgta 1920
ctgctagaag cactttatgt ttcccttttg ggtgaaatgg atttatgtga gtgcttttaa 1980
caaatagcaa tacttataga ctgaaataaa atgaaacttc aaataaaaaa aaaaaaaaaa 2040
aactcgagac tagttctcc 2059

<210> 508

<211> 1337

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (726)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 508

tttgaggagc gctacacctt cgagatcccc ttcttgaggg cccagaggag gaccctgctc 60
ctgaccgtgg tggattttga taagttctcc cgccactgtg tcattgggaa agtttctgtg 120
cctttgtgtg aagttgacct ggtcaagggc gggcactggt ggaaggcgct gattcccagt 180
tctcagaatg aagtggagct gggggagctg cttctgtcac tgaattatct cccaagtgtc 240
ggcagactga atgttgatgt cattcgagcc aagcaacttc ttcagacaga tgtgagccaa 300
ggttcagacc cctttgtgaa aatccagctg gtgcatggac tcaaacttgt gaaaaccaag 360
aagacgtcct tcttaagggg cacaattgat cctttctaca atgaatcctt cagcttcaaa 420

gttccccaag aagaactgga aaatgccagc ctagtgttta cagttttcgg ccacaacatg 480
aagagcagca atgacttcat cgggaggatc gtcattggcc agtactcttc aggccccctc 540
gagaccaacc actggaggcg catgctcaac acgcaccgca cagccgtgga gcagtggcat 600
agcctgaggt cccgagctga gtgtgaccgc gtgtctcctg cctccctgga ggtgacctga 660
gggctgcagg gaaggcagct ttcatttggt taaaaaaaaa aaaaaaaaaa gacggaaaaa 720
aatgtntcac atactattac atccacacct gcatacacac tcgcaacatg tntacacacg 780
tccacacaca cagacacaca gatacccaa atcctctcag aactgagagg aagctgacta 840
ttgatcacia aatggccgcc ctcagtgaat gaggcctagg aactttccag aagccccatc 900
catagatcac aagctcagtg ggctctgccg tgggacttat tggcagtgcc tgcycctgtc 960
aatactcctg ccccaaaatg cactttcaac cctcaggcca gagaaaggac ctcccaaagg 1020
gtgccaagct ccatcaagac taaatttacc aagagtttgg ccagtgtgtg ggagacttga 1080
acacccccca cttccgaaac acacacctac tgggtaactt ctgaacaggc tgctgttccc 1140
tggggttctt caaacctgat acctttctcc aaagggtgaa gtatctttgt cttctccgta 1200
gtaaatgtga taactagatt atgggccatt tggagaaacc aaatggcaac caaaactatt 1260
ccagtgtcag aagcctttcc tggcttaaca gaattgttct tgtgttagct catcccaggg 1320
aacgccctgt gggatatg 1337

<210> 509

<211> 731

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (720)

<223> n equals a,t,g, or c

<400> 509

aagggtgttcn ccttgtgagt taacaagtaa agnagatcat tgttaattac tattttgtat 60
gaatttttgc aaagttaact gtaaagaaac acctgctgac ttgcagttta aggggaatct 120
attctcccca ttccaaacc atgatatgaa tgggcgctga catgtggaga gaatagataa 180
tttgtgtgtt tgcaatgtgt gttttagata aataggattg ggtattttaa ttagcatttg 240
tgaatttaat agcattaaga ttacctcaa atgaaaaaaa atctcaaaat ttctatttgg 300
tttttgtgca ttttctttta aaatgtaatc atatgatttt agtgtgttag acttgctgag 360
tcctagctgt gtttagaaca tctctattct acatttacct tggcacaatt tgaactgctg 420
ccataggttt tgggtgtaaa gaatgtttac tgccctccat ttaaattctg aaaagggatg 480
gtggatgttt tccctctcct acgttagaaa ccattcttaa aaacttttga aaatatagaa 540
ccattaagcc tgctatatct gagcaaatat atgggtacct ttttttctt atctaaagca 600
caagaggccc ataaatcttg agttacttta aattcttttt tttgatacaa gttttcagag 660
caagagaata aaaatcatgt gttattaaac ccctaaaaaa aaaaaaaaaa acccgggggg 720
cttcttgggg g 731

<210> 510
<211> 944
<212> DNA
<213> Homo sapiens

<400> 510
gagcaccccc tgctggcccc tccctccagt ctggctgggg tgtggtgaga tgtgcttgtg 60
tgtccagggtc cctgagcgtg acagcgtctc ctcatgtgcc agtgctacgt cgagcagcag 120
ctctgcacac agcgtggact cggaggacat gtacgcagac ytggttagcc ccgtgtcctc 180
agccagctct cgggtccccg cccagagcca gaccaggaa gagaaaggaa aatctaagaa 240
agaagacggt gttaaagagg aaaagcggaa aagggttcg tccacacaac caccctaatc 300
tgcaaaacct ccagcagggg ggaagtcttc ccagcagccc tcgacacccc agcaggcacc 360
ccccgggcag cccagcagg gcacatttgt ggcccacaag gagatcaagt tgacactgtt 420
gaataaggcg gctgataaag gaagcaggaa gcgctatgaa ccatcagaca aggacaggca 480
gagccctcct ccagccaagc ggcccacac atccccagac cgaggttctc gggaccggaa 540
gtcaggtkqg agactgggtc ccccgaggcc agagcggcag agaggccaga actccaaagc 600
ccctgcagcc ccggctgaca ggaagcgcca gctgtcacc cagtccaaga gctccagcaa 660
ggtcacgagc gtgcccggca aagcctcgga tcccggcgcc gccagcacca aatcagggaa 720
ggccagcacg ctgtctcggc gggaggagct gctgaaacag ctgaaggccg tggaggatgc 780
tattgcacgc aagcggggcca agatccccgg gaaagcatag gccgtgcccc gaccggactg 840
gacgcatttt tatacatagg gtaagcgag ccattttgga ttttgagtt aatgtcttat 900
tttggtgtg attcttttta aaaagtaaaa aagaaaaaaa agtt 944

<210> 511
<211> 517
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (449)
<223> n equals a,t,g, or c

<400> 511
ggtcattggc gcctgcaggt actgctgctc gtgcctccgg ctccggcccc tgagcgatgg 60
tcctttcctt ctgccacggc gggatcgggc actcaccag ttgcaagtgc gagcactatg 120
gagtagcgca gggctcag ctgtggccgt ggacttaggc aacaggaaat tagaaatatt 180
ttctggaaaag ctggccagat ttgcagatgg ctctgctgta gtacagtcag gtgacactgc 240
agtaaatggtc acagcgggtca gtaaaacaaa accttcccct tcccagttta tgcctttggt 300
ggttgactac agacaaaaag ctgctgcagc aggtagaatt cccacaaact atctgagaag 360
agagrttggt acttctgata aagaaattct aacaagtcga ataataagatc gttcaattag 420
accgctyttt cmagctggct acttctatna tacacagggt ctgtgtaatc tggttagcagt 480
agatggtgta aattgagcct gatgtcctag gaattaa 517

<210> 512
<211> 3651
<212> DNA
<213> Homo sapiens

<220>

<221> misc feature
<222> (1283)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (3641)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (3650)
<223> n equals a,t,g, or c

<400> 512
gcggactgcg tcttcgtgga ggacgtggcc gtggtgtgcy aggagacggc cctcatcacc 60
cgaccggggg cgccgagccg gaggaaggag gttgacatga tgaagaagc attagaaaaa 120
cttcagctca atatagtaga gatgaaagat gaaaatgcaa ctttagatgg cggagatggt 180
ttattcacag gcagagaatt ttttgtgggc ctttccaaaa ggacaaatca acgaggtgct 240
gaaatcttgg ctgatacttt taaggactat gcagtctcca cagtgccagt ggcagatggg 300
ttgcatttga agagtttctg cagcatggct gggcctaacc tgatcgcaat tgggtctagt 360
gaatctgcac agaaggccct taagatcatg caacagatga gtgaccaccg ctacgacaaa 420
ctcactgtgc ctgatgacat agcagcaaac tgtatatatc taaatatccc caacaaaggg 480
cacgtcttgc tgcaccgaac cccggaagag tatccagaaa gtgcaaagggt ttatgagaaa 540
ctgaaggacc atatgctgat ccccgtagag atgtctgaac tggaaaagggt ggatgggctg 600
ctcacctgct gtcagtttta attaacaaga aagtagactc ctgagctgca gagtcccccc 660
gggwagccgg caagaccgca caggcaaggc cgatgactct gtgcccactc ctgttggttt 720
ccttgacaat ctactgtgcc actgtgtctac taactcttgt ttacaaaatt tgattctaag 780
ttgaattgct tcattcaaca cmcccaccct ccctcccctc gmggtggtac ctaagctgtg 840
gatttgctaa atgaattaag caacctagaa gatacagagc yaatgaatta tcaaatgtg 900
attaatocca gtaaggaaac actcatttag tgtctgtatt tttggtgtga aaattattta 960
gttgccagta tattctgaag aatgtcttct tgatcagtc gataarcttg cttttttttt 1020
tttttttttt catgaatcat gtttggttcc tgtgaaagtc cctgggtccag ggatcctcct 1080
cctttctctt ttacttctga attctgaaat tcagttagtt acttttgcct ttcgctcttc 1140
tatcacagcc accttgacct tgggtaaaac ccaaggctct tccttctggc taccttcctg 1200
caggctccacc ctgtctgcc tttggtctcct ctgcctctga ctacatctgc caccaacaac 1260
cctccccca cccctgccag ggncagaaca ggcttctcag cagaactgtg actgaaatca 1320
gagctgctgt ctggggcagt gttaactaca cagaggcaca tcctgacagg gtttgcccca 1380
gagatctaaa ttccagaagg agggcaccac acctaggaag gtaaatccag tatcagaagg 1440
ttgctaaaag attaaagatc aagaagcttg gaaacatccc atgggtacaa tgtcttagaa 1500
agtctttaag tcacatacca tgaatttttg cttcattact gaccatata gaccttgag 1560
gaactctttt ttttttttcc ttctactcat ttctgtttcc acctaccctg actcaccgta 1620
ttccagctct tctaccctg cagttatcct agtccagcaa agtcatttct ttcaaaagag 1680
acatcatgtc tgaataaat tactggtagt ctaatatgag ccagagtaaa cagctcctca 1740
tggtaaatga acatgttcag gaagcgatca ccttgatgct tgaacccaac cccagacagt 1800
ggacaattct actttgaaat atccgtgaat atttactgtg ggatccaatt taaacttctt 1860
tcttctctag ccttttaaatt acacaacttt gaactgacac ggatctctta caaagaacaa 1920
tgcggcactg aaggaagaga tgattccttt actcaaacct gcaggaatca gcctattaac 1980
aggcagggga aacggtactt tccaatgaat ggtaactgat ccaggcacrt tatcacactt 2040
cctagtcac tccaccttct ctgtattgcc tgtggcttgt tgtttaagat taagaatcaa 2100
agagattaag aagtatcact tcaagtcttg ctctgctcac ttctatgttt gcagtcaaat 2160

```

tattccttat gttggtgacc taaagagaat tactttcatt catttcattt cccccgtagc 2220
agatggaagt gagaaacctc tgagaaaatg aaaacatcct taaccactat ctttcccttt 2280
tatttgatta ttttatgtca gaaatttgca aaagtttttt tctcctcctt ctcttccttg 2340
ttgcttaact ttttaattca tgccatatgc agatatccaa ttatgtgcat cctgtgaata 2400
aaccacgtct tggtcactgt catattttga accatctcat cagagatgaa taatatcttt 2460
ttaccagaga gagaacgaat gttagccaca tgcccaagtt aacaaagaaa aaatgttctc 2520
aaggttgtcc ttttggttga aatctggccc ttcttgga aaagcaaaaa ttctccctgt 2580
gagagctcaa catctcaaat acaaccacag gaaaaatggc ccaatctgcc agtttaggct 2640
taccagcata taatttttaa tatctttact tctatcatcc caaatcaaag aactcttctc 2700
tattatgttt aatcaattgc aagcaaatag atttttcttt gtaacaattt gttctgcaga 2760
aggctgtttt tcacttttcc tttcttttgc ttctttctgt ctttccctct cttttgtctg 2820
gagaaatcac ttagactctg tgtgcctctt ctacattgca ttctgctctg ctatgttacc 2880
tgctaggctg gcttcttttg actccctata tgattgatga tgtgaaaacc taaattactt 2940
gcagcatagt attacttctt tgatgttctc attagcataa tgttatTTTT gaaaaggaaa 3000
gatactatca cataagtttt cctcatctgt tgtgatatac accaatggat aaactaacgg 3060
aaactgcttt ttgacattaa aagacaggag aaattatatt taactaagta aaagttaagt 3120
cagaattact tgggtgatgt gattcaattt agttaaagga tgatatagag aaaatacatt 3180
atttagcatt atttcttcag ctataatgaa ttgctataga aatcaggcag atctttctaa 3240
tgtgtattga ttgggtcttt cagctactct gaacagatta ctaaggccat ctctcatct 3300
ctaagggaga aaaatagtct gtagatgaat aatgtaaggt aaagagttgc atgtcagtct 3360
ttgtaattat ttacacttta actttctcca gaactcagac atgatttcaa catgggtgta 3420
gatttggtgca ttttatTTTt ctgaccacct cattccagcc aatgtatggt tatccactct 3480
gtgtgccaaa accaatcatg cctttcacgg ccctttagtt cagagaagtt ctgcaactgat 3540
tttagtctc ttgatgtctc aatcttcat gtataccaat cacaatggaa taaagtgttg 3600
agttgtactg ccggggcggc cgctcgaaaa ttccagcacg ntggcgctcn t 3651

```

<210> 513

<211> 1936

<212> DNA

<213> Homo sapiens

<400> 513

```

gcccacgcgt ccggtaaaaa gcccccaaat cgccctggaa tcacttttga gattggtgct 60
cgtttgagg cactggacta cttacaaaaa tggatccat cacgaattga aaaaattgac 120
tatgaggagg gcaagatgtt ggtccatttt gagecgtgga gtcacgtta tgatgagtgg 180
atttactggg atagcaatag attgcgaccc cttgaragac cagcactaag aaaagaaggg 240
ctaaaagatg aggaagattt ctttgatttt aaagctggag aagaagttct ggctcgttgg 300
acagactgtc gctattaccc tgccaagatt gaagcaatta acaaagaagg aacatttaca 360
gttcagtttt atgatggagt aattcgttgt ttaaaaagaa tgcacattaa agccatgccc 420
gaggatgcta aggggcagga ttggatagct ttagtcaaag cagctgctgc agctgcagcc 480
aagaacaaaa caggagtaa acctcgaacc agcgtaaca gcaataaaga taaggataaa 540
gatgagagaa agtggtttaa agtaccttca aagaaggagg aaacttcaac ttgtatagcc 600
acaccagacg tagaagaa ggaagatctg cctacatcta gtgaaacatt tggacttcat 660
gtagagaacg ttccaaagat ggtctttcca cagccagaga gcacattatc aaacaaggag 720
aaaaataatc aaggcaactc gtttcaggca aagagagctc gacttaacaa gattactggg 780
ttgttgcat ccaaagctgt tggggttgat ggtgtgaaa aaaaggaaga ctacaatgaa 840
acagctccaa tgctggagca ggcgatttca cctaaacctc aaagtcagaa aaaaaatgaa 900
gctgacatta gcagtctctg caacactcag aaacctgcac tgttatcctc aactttgtct 960
tcagggaagg ctgcgacgaa gaaatgcaaa catgaatctg gagattcttc tgggtgtata 1020
aaacccccct aatcaccact ttccccagaa ttaatacaag tcgaggattt gacgcttgta 1080
tctcagcttt cttcttcagt gataaataaa actagtctc cacagcctgt gaatccccct 1140

```

```
agacctttca agcatagtga gcggagaaga agatctcagc gtttagccac cttacccatg 1200
cctgatgatt ctgtagaaaa ggtttcttct ccctctccag ccactgatgg gaaagtattc 1260
tccatcagtt ctcaaatca gcaagaatct tcagtaccag aggtgcctga tgttgacat 1320
ttgccacttg agaagctggg accctgtctc cctcttgact taagtcgtgg ttcagaagtt 1380
acagcaccgg tagcctcaga ttctctttac cgtaatgaat gtcccagggc agaaaaagag 1440
gatacacaga tgcttccaaa tccttcttcc aaagcaatag ctgatggaag aggagctcca 1500
gcagcagcag gaatatcgaa aacagaaaaa aaagtgaat tggaagaca aagctcaaca 1560
gcatttggtg agagaaaaga aaaagataag gaaagaagag agaagagaga caaagatcac 1620
tacagaccaa aacagaagaa gaagaaaaaa aagaaaaaga aatctaagca acatgactat 1680
tcagactatg aagacagttc cctygaattt ttggaaagggt gctcttctcc actaactcga 1740
tcttctggga gttctctggc ttcacgaagc atgtttacgg agaaaactac aacctatcac 1800
taccgaaggg caattctatc cgktgatctt agtggtgaaa gtatgtgtaa ccatgtgatg 1860
gttaaaacaa gacttacaat tcctaaatgt gtaactgaga ataaaacgta ctctgttaag 1920
agcatgcatg ttaaaa 1936
```

<210> 514

<211> 1177

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<400> 514

```
cctggtcata tactcttggc atanccttttt ttcctttggc tttgcatggc ttttycttca 60
ggtactgtct cggtatcatt ctgctaataca ttgttacaga atggtgactt catttggtgt 120
aacagtacaa cagcagattt gggtcaggct taatctaagt gttaactttt ttttctgggtg 180
cttttttggg ttgatgactg tctcactttg actataacca tgttttgcat gcaatgactc 240
atgcatgggt ttcttaacta gctaataatta acaattttatt ccatataaaa atggaatttt 300
gcaacatcct ttaataagggt gaggggaagca tgaacctcag acttctggca ctattacata 360
gtaagcacat gaagtagttt gataataaat agcagttcta gtacttcaca tttcaccctgt 420
gtgtgcaatg cctttttctg gggggtgggg ggtgagggaa aacctggtag tgaatgtgta 480
gttggggaat aaagaaaagc actaaatcct gccctttttg tgtgggtttcc ttttgatata 540
actaggttat tcataatgta tacctagaaa agtgaaattg aaaataccaa aagatgtatc 600
atttttattt gaatccatca tgcagtgtac atttcagata atttccttca gtctccagat 660
aggagtgtat ccaaacatct aattttatgt gcactgtgta tcttatatga atgttttatt 720
ttatatacca catgcaaaaa tgtccatatt cactatttaa atgttttaaa taatatattc 780
cttctttata atgctaaatc tatatgagta ccatattttt ataagtcagt ggtctgactg 840
gtttcatttt agaattaaca gctgcttcaa tatgttatcc aatgttaatg tttggctgtg 900
agtagaatat gtaaaagtgg catggcagca cttatgctct gtgacagtat tgtgtgtcat 960
agttgagcag tagctggtag aattaggcag ttggtgatag ttttactttg gtacaaataa 1020
aaactgtata tctatataca aataatatat agatatatat gtccaccagt ataatggcat 1080
tgctgtgtct ggcacttcat tgtacagact tttataataa aagaacttga aagttctaaa 1140
aaaaaaaaa aaaaaaaaaa aaaaaaaggg gggggggg 1177
```

<210> 515

<211> 932

<212> DNA

<213> Homo sapiens

<220>
<221> misc feature
<222> (864)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (880)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (911)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (912)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (921)
<223> n equals a,t,g, or c

<400> 515
ctggcagggtc ccagaagggtg gcgagtttcg cggccagagg cttacagggtc cagggtggaga 60
ggccggggtg gccagggtt cggectccgg cgtcgggaaa tggcggcggg gggcaggatg 120
gaggacggtt ccttggtat caccagagt attgaagacg acccacttct ggatgccag 180
cttctccac accactcatt acaagctcac tttagacccc gattccatcc tcttctaca 240
gtcatcatag tgaatcttct gtggtttatt catctcgtgt ttgttgttt agcattttta 300
acagggtgtgc tttgttctta tcctaattcca aatgaggaca agtgcccagg aaattacaca 360
aaccattga agttcagac gggtataatc cttgggaaag ttattttgtg gattctccat 420
ttactccttg aatgctacat ccagtatyac cacagsaaaa tcagaaaccg aggstataac 480
ttgatctacc gatcaacaag gcattctcaag agacttgctg tgatgataca gtcctctggc 540
aacacagtgc ttctcctcat actgtgcatg cagcactcct tcccagagcc tggcagattg 600
tatcttgacc tcattctggc catcttgga ctggaactca tctgttccct gatattgtct 660
ctcattttaca cagtgaat cccggagatt taataaagct aaaccagagc ctgatatact 720
tgaagaagaa aaaatctatg cttaccccag caatattacc ttcgggagac tgggattcag 780
aactattttc aagcctagaa agaaaattgg tgaaaaagca agggagacac cattgaatac 840
cttgaaggcg acacaatgcg ctgntgaagt aagcgaatgn tggctcttac tttcctcaga 900
ccttggggtg nnaagccagt ngaacgtgaa ga 932

<210> 516
<211> 1159
<212> DNA
<213> Homo sapiens

<400> 516
tttttttttt tttttttcca ttatttttas gcagaaggga aaaaagccct ttaaattctt 60

tcggaacctg aagatagacc ttgatttaac agcagagggc gatcctaaca taataatggc 120
tctggctgag aaaattaaac caggcctaca ctcttttacc tttggaagac ctttctacac 180
tagtgtgcaa gaacgagatg ttctaattgac tttttaaatg tgtaacttaa taagcctatt 240
ccatcacaaat catgatcgct ggtaaagtag ctcagtgggtg tggggaaacg tccccctgga 300
tcatactcca gaattctgct ctcagcaatt gcagttaagt aagttacact acagtctca 360
caagagcctg tgaggggatg tcagggtgcat cattacattg ggtgtctctt ttccctagatt 420
tatgcttttg ggatacagac ctatgtttac aatataataa atattattgc tatcttttaa 480
agatataata ataggatgta aacttgacca caactactgt ttttttgaaa tacatgattc 540
atgggtttaca tgtgtcaagg tgaaatctga gttggctttt acagatagtt gactttctat 600
cttttgcat tctttgggtg gtagaattac tgtaataact ctgcaatcaa ctgaaaacta 660
gagcctttta atgatttcaa ttccacagaa agaaagttag cttgaacata ggatgagctt 720
tagaaagaaa attgatcaag cagatgttta attggaattg attattagat cctactttgt 780
ggatttagtc cctgggattc agtctgtaga aatgtctaag agttctctat agtccttggt 840
cctgggtgaac cacagttagg gtgttttggt tattttattg ttcttgctat tgttgatatt 900
ctatgtagtt gagctctgta aaaggaaatt gtattttatg ttttagtaat tgttgccaac 960
tttttaaat aattttcatt atttttgagc caaattgaaa tgtgcaccyc ctgtgccttt 1020
ttctcctta gaaaatctaa ttacttgga caagttcaga tttcactggc cagtcatttt 1080
catcttggtt tcttcttgct aagtcttacc atgtacctcg gccgcgacca cgctaagccg 1140
aattccagca cacgggcgg 1159

<210> 517

<211> 2451

<212> DNA

<213> Homo sapiens

<400> 517

tgaatacaat agcgtcaatg ccaacatgat cgctactctc ttcactagtc ttctcctgag 60
gcctccaccc aaccttatgg caagacagac tccaagttag cgccagcgtg ctattcagtt 120
ccttctgggc tttctgcttg ggagcgaaga agactaaggc ttttactggt ctctgatrtrt 180
ctagaagcag acsatmtcgg gctccaagta tttcagaatg atttaaaaag tcatgccaca 240
ggaagggctc attgcagaat ttcaagttct gtttatagta aaaaggaaga gcgtttccta 300
atccctcctt taccatatcc tacacagaaa aatactttta gacttatatt gccaaagcaa 360
agttaccata ttttggtggt tttgtgtttt ctctttataa ggcaaaaaga tctgtattta 420
cactccttca cctagggatg tgtttgttgc cctcctaccc aattgtcatg attgtcctta 480
gtaccctagg cctagattct gagatcttcc cattctaggc ctacaagcac tacttgctgt 540
agctgagact tgtctagagt cctttgtttt gcacttttga cccaccctt cctggatcac 600
tcctttgcac tccactcccc tcgttctgtc actttgaacg aagtctgagt gaggctagt 660
actccttggg tgcctcaac agtgaattca ctgtctgctg gcagttatta catgcatttg 720
tgcatttcta ctacaatggc atctttatgt ctctgtaaca ttggcctttt catggctcca 780
cactgggtgg aaccatattc tcttagatca catttagtag cataactgta gggactatta 840
gagatggcat ctcacgatg agagagaatc acaatcagaa tggaagcact ttgagtatct 900
gaagagttag agcattcatg tttgacaggt cctgcttccc actatccttt tcctgttatt 960
attcaaattt tacacaagga ctaatcctgg gtgtctctga gacctctc ctgcctagac 1020
atccacctcc agagcaaac tggtccca gtaaaagagg aagtcttgta cctcaggcag 1080
gccatcttag agctattgct ccttccca gcaaaaggtat tgtggatgac ccttagaatc 1140
cattctctgg tcttctgaaa taccaagggc agatgtcacc tccttctca gcaggactga 1200
ctctgggctc tacaaccagc tccttcacat aaagggttta gagactcccc ttggctccca 1260
gtcaccatat ccagtgttgt gtaaaagagc tggccaacag gaccaacca gcaccttacc 1320
tctcccatag aagatgacct tctgagcttt tcatttattc aagctctgtg gtacagcctt 1380
tttttaaat aaattaatct atattggttg acaacaagc caccaaccac tgactgcaaa 1440
actgcctgat gcagttgggt tcctcctggt tttcttttgt tacaaccacc cttgcctggt 1500

```

tacattaatt gcaaggagca taacgtacag gctgtatgta caatcctggg cattgactct 1560
gtgacatttc tagcatatcc aaggcaccac cagtgatctt tcctgtttct tgggtgggggt 1620
ggggggggaag gtacgtattc tgcaatatgg ctaaaccctt tcctgattga gagttaaagc 1680
aataggagtc aagttactgg tgccacagat ctggaggtat gataggtcag gggctaggtg 1740
ttgaacttag ttaatggaag actgagagca gaacaggttt gtcattctccg caagccagaa 1800
agtatcaca aaaagaggca gatgatagac actggggtag ggcatacca cagggaaata 1860
cctttcctgg gcttgttttc tagcatatca ctgacctggg atctttgggt gatcaagggt 1920
gtggttagtg gaggtctgt gctgcacgta tgcagtatcc tatctcttc tacatcagat 1980
caaaacacta agttggtgta ctgcctcgac cttttttcag ctcattcctgg aacatatata 2040
gagttgagag ttttagacaa tctctaggtg gaggagacaa gatgtagacc cagacagaag 2100
aaatctgctt ccctaccatg gctattccag caccccaacc tgtaattgcc aagtcctcta 2160
aggtactaat ttgtagctgc tctgaagtaa ggatttcgga ttcagctggg agggaaagac 2220
tctgcacctg ctgtcttagg gaagaaatgg ttcaaatcca tgtggtgaca ttgcattagt 2280
ctccctttca ctgttttctt attctgtaat tgtttgttat atttcccaa aacgtcttga 2340
tcactaagca aagctgctag tgggattcta tatttcgtgt catctttttt attataattt 2400
attgcaaatt ttttctgaa taaatatatg ttgtgtgaaa aarmaaaaaa a 2451

```

<210> 518

<211> 989

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (336)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (871)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (891)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (910)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (913)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (926)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (947)

<223> n equals a,t,g, or c

<400> 518

```
cagtgcgcgc cggggtcccg ggtgcacagc ctcaggatac cccgtgcccg cagctcgggg 60
ccgcgcggagg cgatcagtgg gtgaccgcgg ctgcsaggcg actttgtcat ccgtcctcca 120
ggatctgggg agaaagagcc ccatcccttc tctctctgcc accatttcgg acaccccgca 180
ggactcgttt tgggattcgc actgacttca aggaaggacg cgaacccttc tctgaccca 240
gctcgggcgg ccacctgtct ttgccgcggg gacccttctc tcatgaccct gcggtgcctt 300
gagccctccg ggaatggcgg ggaagggacg cggasncagt gggggaccgc ggggtcggcg 360
gaggagccat cccgcaggc ggcgcgtctg gcgaaggccc tgcgggagct cggtcagaca 420
ggatggtact ggggaagtat gactgttaat gaagccaaag agaaattaaa agaggcacca 480
gaaggaaactt tcttgattag agatagctcg cattcagact acctactaac aatatctgtt 540
aaaacatcag ctggaccaac taatcttcga atcgaatacc aagacggaaa attcagattg 600
gactctatca tatgtgtcaa atccaagctt aaacaatttg acagtgtggt tcatctgac 660
gactactatg ttcagatgtg caaggataag cggacaggtc cagaagcccc ccggaacggc 720
actgttcacc tttatctgac caaacgcctc tacacgtcag caccatctct gcagcatctc 780
tgtaggctca ccattaacaa atgtaccggg gccatctggg gactgccttt accaacaaga 840
ctaaaagatt acttgggaag aatataaatt nccagggtcca ggttccaata ngagagaaaa 900
gaacttcttn aanggaatac ttgaanaagt gggaaaggaa cccaagnttg acacaggctt 960
acttgaaatt tgatatgcct tgctgatca 989
```

<210> 519

<211> 3315

<212> DNA

<213> Homo sapiens

<400> 519

```
ggcagagcgg tcgacatggt ccagggtcccg gwtagcgagg gcggccgcgc cgctrccagg 60
gggtaaagga agtggtatct ttgacgaatc aacccccgtg cagactcgac agcacctgaa 120
cccacctgga gggaagacca gcgacatttt tgggtctccg gtcactgcc a ttcacgctt 180
ggcacacca aacaaacca aggatcatgt tttcttatgt gaaggagaag aacaaaaatc 240
ggatcttaaa gctgcaagga gcatcccggc tggagcagag ccagggtgaga aaggcagcgc 300
cagaaaagca ggccccgcca aggagcagga gcccatgccc acagtcgaca gccatgagcc 360
ccggctgggg ccgcggcctc gctctcaca caaggtcctg aaccaccggg gaggcaaact 420
cagcatctcc ttctactaag agaagccact gctccaccgg gagccagacc agaaactcaa 480
gagatagggg agccatgttt tcatttcctt ttgccc aaat gagcggggtg ggaagagggt 540
tagtcttatg tgagcctggc tgctcagcgt ctcttgccg tcatgacagc tgcttgaga 600
cccggtgcctt ccagatggct gggagatgcc tctgtgggga tgaaatggg caccctggc 660
catcactcat gtgtagtcca gggttgagag gaactggaag gggggtgagg gtggggaggt 720
ggggcagggc atggctcctg gatcaacagc ccgccagctg attggatgtc taggaatgac 780
tgaaagaaac caaaacagcc tgtccactgc tgctgtggga tggaggaggc gtaagcagaa 840
acactaacag tatattgacc tcttagcaga accgcttcca ttctggagat cacggctgct 900
aaatccagca tccccacttc attttacc cagcatattg ttctgtagtc ttttcttgaa 960
acatcttgat tgcttttctt cggcagcttt caaaaaacca aataataata gttatccgtc 1020
ttctacttca tgggaagtgt ttttggtgcc ctgaccctct gaagtgccca gttcctgcca 1080
tctgaaacct cggcctgac tgatctcatg ttggaatctg cctgtctttc acacagggct 1140
ggtcttggtc ctttacatgc cagttttgct tgtgaattct tgcttttttc ctctcatcag 1200
```

ccttaagttt aggcgtttgt tgttctccag tgatgtagac agttcccttc acaagtcaca 1260
gttcttccca taaatgaggc ccgctgacct ctgcgggact ttaaaaatct attcagatat 1320
ttccgagtaa gtggcttggt taaattcttc ctgtgtcttt ctttattcct taattgggtg 1380
gtggaaagaa gagatgcttg ggaaccttgg gttcttaggt ttggattctt taataatatc 1440
taaaaagcta aattttaaat accagcttta cataaatgat tgttgactct ggtctgtttc 1500
tgacaccttt ccagaaaaaa gtcaattgtt caggtacacc aaagaggaa aagagctgtg 1560
gaggccaccc tctacaaagc tttatagaac ttctggatct aactcacaaa caagcttcca 1620
gaagagacta gagaccttag gccaggagat gaaggagtgc agtagcaaag tcacacctgt 1680
ccaattccct gagctttgct cactcagcta atgggatggc aaagggtggtg gtgctttcat 1740
cttcaggcag aagcctctgc ccatccccct caagggtgctc aggccaggt ctcagtctgc 1800
ccttgggttg gcatctgtta acagaggaga acgtctgggt ggcggcagca gctttgctct 1860
gagtgcctac aaagctaata cttggtgcta gaaacatcat cattattaaa cttcagaaaa 1920
gcagcagcca tgttcagtca ggctcatgct gcctcactgc ttaagtgcct gcaggagccg 1980
cctgccaaagc tcccccttcc acacctggca cactgggggc tgcacaaggc tttgtcaacc 2040
aaagacagct tccccctttt gattgcctgt agactttgga gccaaagaaac actctgtgtg 2100
actctacaca cacttcaggt ggtttgtgct tcaaagtcac tgatgcaact tgaaaggaaa 2160
cagtttaata gtggaaatga actaccattt ataacttctg tttttttatt gagaaaatga 2220
ttcacgaatt ccaaatcaga ttgccaggaa gaaataggac gtgacggtac tgggccctgt 2280
gattctccca gcccttgca tccgctaggt gagaggaaaa gctctttact tccgccccctg 2340
gcagggactt ctgggttatg ggagaaacca gagatgggaa tgaggaaaat atgaactaca 2400
gcagaagccc ctgggcagct gtgatggagc ccctgacatt actcttcttg catctgtcct 2460
gccttctttc cctctgcgag gcagtgggtt gggattcaga gtgcttagtc tgctcactgg 2520
gagaagaaga gttctgcgc atgcaagccc tgctgtgttg ctgctgttta catttgggag 2580
gtgtcctgta tgtctgtacg ttggggactg cctgtatttg gaagatttaa aaacctagca 2640
tcctgttctc accctctaag ctgcattgag aaatgactcg tctctgtatt tgtattaagc 2700
cttaacactt ttcttaagt ccttcggtgc caacattttt tagagctgta ccaaaacaaa 2760
aagcctgtac tcacatcaca atgtcatttt gataggagcg ttttgttatt tttacaaggc 2820
agaatgggtt gtaacagttg aattaaactt agcaatcacg tgctcagagc ttttgcctgt 2880
cagttgtgtg tgtcccttat agtcccttcc ccacagctc ttgctgaaag agtttgcctt 2940
gttttgtttt gttgttttgt atttagccag aggatgcaa aattagtctt ctcaaagctt 3000
tgagttagat aagtgtggga ataagccagt tttttttttt ctgtttctgt aacttaaatg 3060
aacgggtttt tttcccttgt atgccacttg tcctaactatg tccttaaggt gtttaacctg 3120
cctctgacct ggcttgcaat gcataggggt aggagaagca gagagcttgt catatgcaag 3180
tcctgtcaag aaaacaggtg gggcatgggt ggcctcaggg tttgtagtct ttggggctct 3240
tggggaggcc aggggtgggg agggatccag tttgagctcc agggagtttg agaccagcc 3300
tagacaacat acttt 3315

<210> 520

<211> 2361

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2121)

<223> n equals a,t,g, or c

<400> 520

gttaatccaa tcattaatgc agtgtaagtt atatgtgaaa tgagtctttg gtatttcata 60
taggaattat tttttttttc atttaaaaca aatccacatc ttttgtaaaa gccactgttt 120
tgaacacatt tccttgaaaa atgttggtgg tttttgtgat tattttattt tttagatttc 180

ttttcttttg cactacaatt tttggaatcc ttttggaat actgtgtgac tgctgtgttt 240
tgcagcatga attatagtaa aatggtcttc aattcttaac aaatggactt ccctgatgag 300
acaaaaatgg tgatttaaca gtttttcttg tgtcccctaa aaagtggctc tgcttcagaa 360
gtacttgcca gtttttaatt tatttgtgac ttttcaccct accctgctcc catatacctt 420
ctaccatcag ctgtcttggt tcatcatttc tctgagattc tgtgtgcagt gagcaatttt 480
tgtgtcagaa attctttgtc agaacaaata tatgtaacag gctcaactta ctgtaaaagt 540
acttgtgttc tcttcatttg tctgtaaaaa tttccctaata tgattatata gtgtaagaat 600
agttgaagac tagttgaaga ccttttgtga tttcattatc atgcctatgc agaagaaaaa 660
tcattgagga aaattgtcat tagccagttt aactgattca aactctgttt atttcatact 720
aaactagtga ataagtgaat taaaggaaac tcgtcattaa tctaaagaca gagttcaaaag 780
gaattgggcc aaatatattc tcagtatttg gaactaatgt ttttaagggt tttaggaaaa 840
tcaggtcatt taagaaattg ttttgtagtt tctggtttat agcagtcctc aagttttcca 900
tcttcactgt atgttgctga aagtgaggat gaggatacag akttgatatt tttagaaaca 960
gtaattttac ttttaaggaa attggctagc tctttgagct agagagctgt aggaagctca 1020
acatttcttt gtagagaacg ttgctttttt tggattgtac aggtataaaa acattgcttt 1080
tgttgaattg tataggtgta aaaagggaat aactgtatgc aggtttgaaa aggaatgtg 1140
ctttaggcat gagtcataag atgccattgt actgttaggc attttatttt cctttagaaa 1200
tggacatcag ctctctctct ctgactggta acacatagcc ccaaagcatg agattatttt 1260
tcattgggtt tttattgttg tttagttttg gtttgttacg ccagcccagt ctgtctgcgg 1320
aacactgact ctgctctcta atgagaacaa agttagaat ctgccgataa cctaaaataa 1380
tttagaaatg aattaaaaat gtgaaatcgg gttaaagtga tgatgataaa atagcatgca 1440
agaaacaagc tccttccatc agacttggct actgttttct tctggtacga tttggtttgg 1500
aagagcctct tgtttccttc tctttgggtt atgtcttcgt ttcttaatat gtttgtaaca 1560
ttattgagat ataattcaca taccttaca ttcacttatt ttaagggtac aatttagtgg 1620
tttttagtgt attcacaagg ttgtgtaacc gtgaccacag tcaattttag aacatttctg 1680
taccceaaaa agaaaccctg tacccttgag cagtcacctc tcattttctc ccagtgccca 1740
ccccatcccc gagcccctgg caaccactaa tctatttctc tctctgtaga tttgcttatt 1800
ctggctcatt catataaatg gaattctaca atattcggtc ttttgggact ggcttcccaa 1860
atatgatttt ctatatggag tgagaaaatt ctctcatct tgagaactct tattgctgtg 1920
aaagggagtg gttggtaaaa tcaatagatt tcaggcaaga gggccagata cctaacaggt 1980
ttttctccgt gaatcttatg ctgagtagtt tttcctcata accaagcatt tatgatatat 2040
tactacttat aatactgtgg ctagyctcta gaatggatgt tgaatcttgc tctcagcggg 2100
aagatcggct aaaacgggct naatcgccca aatcgcccaa tgcttgcaat aattgcaagt 2160
gttcagtggc tacttgacag ctgaactcgg cagggcccgga attttgcatc cgggggttgg 2220
gttacagccc agataagggt tggcggcacc gaatgctgga gttttcgggg cattcgggaa 2280
aagggccctt ttgtagggc gttacggtta gctgtccgat agggcccttt ccgcccgtga 2340
aatgcaagtc tcaagagtcg a 2361

<210> 521

<211> 2521

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1721)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2477)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2516)

<223> n equals a,t,g, or c

<400> 521

```
gtgggtcacg tgaaccactt ttcgcgcgaa acctggttgt tgctgtagtg gcgagagga 60
tcgtggtact gctatggcgg aatcatcgga atccttcacc atggcatcca gcccgccca 120
gcgtcggcga ggcaatgatc ctctcacctc cagccctggc cgaagctccc ggcgtactga 180
tgccctcacc tccagccctg gccgtgacct tccaccattt gaggatgagt ccgaggggct 240
cctaggcaca gaggggcccc tggaggaaga agaggatgga gaggagctca ttggagatgg 300
catgaaagg gactaccgcg ccatcccaga gctggacgcc tatgaggccg agggactggc 360
tctggatgat gaggacgtag aggagctgac ggccagtcag agggaggcag cagagcgggc 420
catgcggcac gtgaccggga ggctggccgg ggccctggcc gcatgcgccg tgggctcctg 480
tatgacagcg atgaggagga cgaggagcgc cctgcccgca agcggccca gtggagcggc 540
cacggaggac ggcgaggagg acgaggagat gatygagagc atcgagaacc tggaggatct 600
caaaggccac tctgtgcgcg agtgggtgag catggcgggc ccccggtctg agatccacca 660
ccgcttcaag aacttcctgc gactcacgt cgacagccac ggccacaacg tcttcaagga 720
gcgyatcagc gacatgtgca aagagaaccg tgagagcctg gtggtgaact atgaggacac 780
tggcagccag ggagcacgtg ctggcctact tcctgcctga gcaccggcg acgtgctgca 840
gatctttgat gaggctgccc tggaggtggt actggccatg taccccaagt acgaccgcat 900
caccaaccac atccatgtcc gcatctccca cctgcctctg gtggaggagc tgcgctcgct 960
gaggcagctg catctgaacc agctgatccg caccagtggg gtggtgacca gctgcaactg 1020
cgtcctgccc cagctcagca tggtaagta caactgcaac aagtgaatt tcgtcctggg 1080
tcctttctgc cagtcccaga accaggagggt gaaaccaggc tcctgtcctg agtgccagtc 1140
ggccggcccc tttgaggta acatggagga gaccatctat cagaactacc agcgtatccg 1200
aatccaggag agtccaggca aagtggcggc tggccggctg ccccgctcca aggacgccat 1260
tctcctcgca gatctggtgg acagctgcaa gccaggagac gagatagagc tgactggcat 1320
ctatcacaac aactatgatg gctccctcaa cactgccaat ggcttccctg tctttgccac 1380
tgtcatccta gccaaaccag tggccaagaa ggacaacaag gttgctgtag gggaaactgac 1440
cgatgaagat gtgaagatga tcaactagcct ctccaaggat cagcagatcg gagagaagat 1500
ctttgccagc attgctcctt ccactctatg tcatgaagac atcaagagag gcctggctct 1560
ggccctgttc ggaggggarc ccaaaaaccc aggtggcaag cacaaggtag gtggtgatat 1620
caacgtgctc ttgtgcggag accctggcac agcgaagtcg cagtttctca agtatattga 1680
gaaagtgtcc agccgagcca tcttcaccac tggccagggg nmgtcggctg tgggcctcac 1740
ggcgtatgtc cagcggcacc ctgtcagcag ggagtggacc ttggaggctg gggccctggt 1800
tctggctgac cgaggagtgt gtctcattga tgaatttgac aagatgaatg accaggacag 1860
aaccagcatc catgaggcca tggagcaaca gagcatctcc atctcgaagg ctggcatcgt 1920
cacctccctg caggctcgct gcacggtcac tgctgccgcc aaccctatag gaggcgcta 1980
cgaccctcg ctgactttct ctgagaacgt ggacctcaca gagcccatca tctcacgctt 2040
tgacatcctg tgtgtggtga gggacaccgt ggaccagtc caggacgaga tgctggcccc 2100
cttcgtggtg ggcagccacg tcagacacca cccagcaac aaggaggagg aggggctggc 2160
caatggcagc gctgctgagc ccgccatgcc caacacgtat ggctgggagc ccctgcccc 2220
ggaggtcctg aagaagtaca tcatctacgc caaggagagg gtccaccgca agctcaacca 2280
gatggaccag gacaaggtgg ccaagatgta cagtgcctg aggaagaat ctatggcgac 2340
aggcagcatc cccattacgg tgcggcacat cgagtcctat atccgcatgg ggaggccca 2400
cgsgcgcac catctgcggg actatgtkra tcgaagacga cgtcaacatg ggccatccgc 2460
gkkratsytg rgagagnttt mataggcaca cagaakttca gcktyatgcg caattnaaag 2520
g 2521
```

<210> 522
<211> 1303
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1279)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1286)
<223> n equals a,t,g, or c

<400> 522
caaaatccgc aaacagatca acatcaataa tccctttggt ttcaaacaca ttagtaacct 60
caagagcatg gatcattttg atgacattgg tcccagtggt gtaatggcct cccagggcat 120
gatgcaaagt ggcttatcca gagaattatt tgaaagctgg tgtactgata agaggaatgg 180
tgtcattata gcgggatact gtgtagaagg gacacttgcc aagcacatca tgtctgaacc 240
tgaagaaatc actactatgt ctggacagaa gttaccactg aaaatgtctg ttgattacat 300
ttcttttctca gctcacacgg attaccagca aaccagtga tttattcgtg ctttgaaacc 360
gcctcatgtg attttagtcc atggagaaca gaatgaaatg gccagattga aagcagcact 420
gattcgagaa tatgaagata acgatgawgt tcacatagag gttcataatc ctcggaatac 480
agaagcagtg accttaaact tcagaggaga aaaactagcc aaggttatgg gatTTTTtagc 540
agacaaaaaa ccagaacaag gccagcgggt ctcaggaata cttgttaaaa gaaactttta 600
ttatcacata ctttctcctt gcgacctgtc caattatact gacctggcca tgagcacggg 660
gaagcagacc caagccattc catatactgg tccctttaat ttgctctggt accagctgca 720
gaaattgaca ggtgatgtgg aagaattaga aattcaagaa aaacctgtct tgaaagtgtt 780
caaaaatatt actgtaatac aagaaccagg catggtggta ttagaatggc tggcaaacc 840
ttctaattgat atgtatgcag atacagtaac aactgtgata ttggaagtcc agtcaaattc 900
caaaaataaga aaaggtgcag tacagaaggt ttctaaaaaa ttagaaatgc acgtttacag 960
caagagggtg gagatcatgc tccaggacat atttgagaa gactgtgtaa gtgtaaagga 1020
tgactctatt cttagcgtca cagtggacgg gaaaactgcc aaccttaact tggagacacg 1080
gactgtagaa tgtgaagagg gaagtgaaga cgatgaatcc ctccgagaaa tgggtggagct 1140
ggctgcacag agactgtacg aggccctgac gccagttcac tgagactgtg cctgtatatg 1200
aactttgaaa aaatacttga ctctactttt gttacctaaa ataaaatgca ttcgtttctc 1260
wgggaaaaaa aaaaagttn gccaantttc ccttgggggt att 1303

<210> 523
<211> 1100
<212> DNA
<213> Homo sapiens

<400> 523
ggaggaaagt cagtgaagca atcgcggacc accggggctg ccagctcgcc tgactcccg 60
cctcttgccg tcctaggggc ggagaagggt gcgggctctt cgcctttgt gtcctccttc 120
tttactaac ttctggactt tccagctctt ccgaagtctg ttcttgccga aagcccaaag 180
gctggaaaac cgtccacgat gaccagcatg actcagctctc tgcgggaggt gataaaggcc 240
atgaccaagg ctgcgaattt tgagagaggt ttgggaaaga ttactcttgt ctctgctgct 300

```

cctgggaaag tgatttgtga aatgaaagta gaagaagagc ataccaatgc aataggcact 360
ctccacggcg gtttgacagc cacgttagta gataacatat caacaatggc tctgctatgc 420
acggaaaggg gagcacccgg agtcagtgtc gatatgaaca taacgtacat gtcacctgca 480
aaattaggag aagatatagt gattacagca catgttctga agcaaggaaa aacacttgca 540
tttacctctg tggatctgac caacaaggcc acaggaaaat taatagcaca aggaagacac 600
acaaaacacc tgggaaactg agagaacagc agaatgacct aaagaaaccc aacaatgaat 660
atcaagtata gatttgactc aaacaattgt aatttttgaa ataaactagc aaaaccagaa 720
gcagctagaa atattcttgagg gaaaaagga cctggatatac aagtagggta aagggtgggg 780
tgtctttttt cactttaagc atcttgtttt ctaatcatgt gtgataattg ggtgaaaaat 840
tcttagctca aagtgtttta aaaacaggta aagcaaagaa actagcagga ccactctcag 900
ttaagattaa aactaaagtc cagtgttaag cttaaaggaga aatagaaatt aatggttcta 960
attctgtttg ggctgctagg aacaacagaa atttttcatg gttctagaag ctggaaagtc 1020
ctgggtcaag gccacagaga tcctgttagg tgagggcccg cttcttggt catagatggt 1080
gccttctcac tgtgtgtga                                     1100

```

<210> 524

<211> 1963

<212> DNA

<213> Homo sapiens

<400> 524

```

atcagctctt ctgcacattg cagtgaatgc tttggtatgc ggggagaaac actcttaggg 60
tgcyggtcct tggcatgact cttgccattc taattggaat tagtgccacc ctgagcttgg 120
attttgaaca aggccttatt ctttcaggaa gacaactaat ggatgatagc aagttcatcc 180
acttactggg cttgtgccat gagcaaaatt caaagtcctg tatactcttc attgtagatt 240
tttaataact ctttttccta aaaaactcaa gggtttaaaa attgctattt tatattttta 300
atgatattga gcagctacct acaattttcta tgtacatttt gttccccccc caccaccacc 360
cccaaattac gttccttttg acattttcct catctgctgt ttgtgacaag tcatcagcca 420
gatttcctga ctgacacata ggtatgatca gtgcaggaga gacctgcgca ccacaggctg 480
caaactggag gttctgttct catggcagtt tgggcagtaa cttttgagag aggccaaaaa 540
aaggaggatg acatgctgtc tcctctcttc agtatagaca ttaggctctt attcagaaag 600
gatttttctt taaaaatgta cttactttac tgaactactt acaggcacat ttcttcataa 660
ggccacacct aatccaaaca agacagtctc ccaacactga agttccaaaa taatccttac 720
cactttgtaa accatttata gctttgaaag tgtaagtga ttccttcggt attatttatg 780
catgttcatg aactctgtgt gtacattgga ataggagtta acacattcac atttactgtc 840
tattttcttg tgtgccttat gagatggctt ttctgactgt atctcaatag tctttctttc 900
tatgcagggt tataatcagt acaactactg ttttctaaaa tactactact caaggctcgg 960
agtttgattt taaattacac tgaccaagta acaatgtatt ccatttcagg aactgaatat 1020
ttgactgtta acctttttcc catacgtcca gtgtggcatg gagcatatgg acttgacaga 1080
catctctcac ccagacgccc acgtgtgaac accccacat ccacatctct ggggtgaaac 1140
cagcctagag tggggacgac gctaattggt ttgcttttaga accgtctttt cttacccttt 1200
tagactcgtg ttttgatga gacaccattg caagaaaatt ttatccctcc agaagtattt 1260
tattactaaa gaacaaaagc aaaaaaagct taaattgcac tgggttaaagt acagtttcca 1320
acagctgtcc ttctcagta ctctaattgc cactccaccg cgagtgaag tcaactgtgt 1380
gtgtacacag gtggtcccaa tcaaaactcc atcttttgag cccaattatg tccattttgt 1440
tatagactaa atcaggggtt tgttctacaa gaacaataca tgttttacct ttctctttaa 1500
ctagaaggat aactagtaat gcatcaacat aatttctgta ttaaccatca tgcgcacaag 1560
aaatacatag taaataagga agctgaaaac tcctggcatt ggatcttaag ctagatgatt 1620
agaatgtgaa aaagatttta caaatgtaaa acttctatct ctctgtagaa actttcttca 1680
ctttgctgtg caagaagaca ctgctttgct atatttaaaa tggctttttt aaaagagatt 1740
tatgtatttg gtaaatgttt gtagtcaaca gttcacacaa gaagctgtac acggtttgat 1800

```

catgtaaaac cgtttggcgg cacaagctgg actttgttgc catccttgag atgaaccttt 1860
taagaaaaat aagttaatct caatttttcc ctgaatgtgt tgtttttctt cattatacaa 1920
taaatataat agtgaacttt ttaaaaaaaaa aaaaaaaaaa aaa 1963

<210> 525

<211> 794

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (782)

<223> n equals a,t,g, or c

<400> 525

aggagagtgg gctctagcag gtggagatac actacgscct tgacacactt atagaatggt 60
ggagagaaaa gaatggttcc ytttgttccc sgcttattat cgtattagac agcgaaaatt 120
caacccttgg ggtgaaagaa gtgaggaaaa ttaatgacca gtatattgca gtgcaaggag 180
cagagttgat aaaaacagta gatattgaag aagctgacct gccacagcta ggtgacttta 240
caaaagactg ggtagaatat aactgcaact ccagtaataa catctgctgg actgaaaagg 300
gacgcacagt gaaagcagta tatggtgtgt caaaacggtg gactgactac actctgcatt 360
tgccaacggg aagcgatgtg gccaaagcact ggatgttaca ctttcctcgt attacatatt 420
ccctagtgc tttggcaaat tgggttatgct gtctgaacct tttttggatc tgcaaaactt 480
gttttaggtg cttgaaaaga ttaaaaatga gttggtttct tcctactgtg ctggacacag 540
gacaaggcct caaacttgtc aaatcttaat ttggacccca aagcgggata ttaataagca 600
ctcatactac caattatcac taacttgcca tttttgtat gctgtatttt tatttgtgga 660
aaataccttg ctacttctgt agcctgctct cactttgyc ttycttaagg taattatggg 720
aatataaggc sttggggaaa aacattttaa tgaaaggat gtaggggggt ccaatgctta 780
cngtaaatgc ctaa 794

<210> 526

<211> 2599

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (57)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2410)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2461)

<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (2475)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2500)
<223> n equals a,t,g, or c

<400> 526

```
akcggccgsm tcgcatctca gctggttgcc tttggttaga gctcccgta gacyttngkt 60
cggscctagg atttggtagc cccgaagtgt gggctctctc cagtaccaga ctcatttcag 120
taccagcctt tgggaagtcg tgtgaatacc tcggtctctt agccacaggg atagaatggc 180
ggcctgacgg agccgcggcg ccggcggaagt cgctgaggcg cgactggaac cccagacca 240
gctcaaacgg gagccaaaac tcgaagcttg gaagaattag caggaaatgg cggatgaggc 300
gttggttttg cttctccata acgagatggt gtctggagtg tacaagtccg cggacagggg 360
gaggtggaaa acggacgatg tattactaag ctggaaaaca tggggtttcg agtgggacaa 420
ggattgatag aaaggtttac aaaagatact gcaaggttca aggatgagtt agatatcatg 480
aagttcattt gtaaagattt ttggactacg gtattcaaga aacaaatcga caatctaagg 540
acaaatcatc agggcatcta tgtacttcag gacaacaaat ttgcctgct tactcatag 600
tctgcaggaa aacagtattt agaacatgca tctaagtatt tagcatttac gtgtggctta 660
atcagagggtg gcttatcaaa cttgggaata aaaagtattg taacagctga agtgccttca 720
atgcctgctt gcaaatttca ggtgatgata cagaagctgt agaacatact gaaatgcaag 780
gcttcaacag tgtaaagaga taaattattc atgtaaaagt atttcaagta gtgatgattt 840
aattacattg ttcgatgttt gtacaggagt aagcatgtat ttttatcaat ttaacacaga 900
tcaaaggaga tgaagggaca ttctgccatg acatacactt aacccaaact attcaaaatg 960
aaaaccggat ttcaaataac cagacaccaaa gatgcagggc ccttatttta aaccttttta 1020
tttggttaga gtgatatgta tttagccata gatggagaaa caaagctcag ggtttgttga 1080
attagcatga gagaaaatta tgtaccaaca gaattatttg tgagaagaat gaacaaattt 1140
tgataaagta tgaatttggt ttattttaaa aagcaaacat actaaatttt tttattttta 1200
ttgcttataa ttatttaaga atgtttacac ctgtataagg atttcatata tacattgtat 1260
gtgtgtatat ataaatacat atatgactgc ctaaattgtt tataaattta atttttcttt 1320
aataggttca ttccttcaga gctccattaa tgtaatcaaa atgaaatata gattagttaa 1380
aatgtgaatt cagtgactct agggccaaag aatattaggt atgtttggaa agaatttttg 1440
tattttattc tgttacagtt ttgactttca acttctctcc ccgtgcatgg aagtcctggt 1500
aaaggatcta acatctttat tcccttcttt cctcttccag ctgagcagar ttggataatt 1560
gaattagtca ttctgacatt ctttggaaca tatcatctta gtggtttggg gtcagtgtct 1620
atctgatata tctttcttac cacctcttct acttactttc tcttacttaa attatctggc 1680
ataagcagtt atctccagct tttgttagaa tcttgcatgt tgattactaa aactatactt 1740
tgtttcccat ttatttatta cccttttgca tgtatttggt tgacagggaa ctctgcagca 1800
gggggtgact gacacacca acaagatggt tcaactgggt ctctgccata gaaatggcag 1860
attaagaaga ttgactatac caaacattat attaaaaaca caraataaaa actataaaaa 1920
tgtactttag gacattaaag aaaactcaag ttagaagcat accattttcc tttcatggaa 1980
gggtacagta ttacaaagat aatttggtta acttgattta ttaaattcta gttatgtgcc 2040
ctataatgat gtttcagtca gtgacagacc tcatatatgg cagtgggtcc ataagattac 2100
aatactgtat ttttactgta cttcttttat gtttagatat gcaagtactt accattgtgt 2160
tacagtgtcc tacagtattc actacaataa tatgctgtac aggtttgtag cctaggagca 2220
ataggccata gcttaggtgt atagtagatc ataccatcta ggtttgtgta agtacactct 2280
gtgattgtac aattttaaaa tctcctaatt atgatgcatt tctcagaatg tatccccctt 2340
gctaagcaat gcatgactgc aatcctaatt ctacacatgt ttgggggraaa aatttttaatt 2400
ttgaaaaaan ttaggaaagt tcctacyaaa tatacatgta taaagtttat taaaagtcac 2460
```

naatgaccca kggankakct matggacaca gaagttagan ccaaaataga acacaataga 2520
ggaacttcca aaatgaaaac aggtgtggag aaatgtgtgt gtggaaaaag ccgggggttc 2580
aaataagttg ggtttggtt 2599

<210> 527

<211> 1305

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1293)

<223> n equals a,t,g, or c

<400> 527

aattcggcac agccacactg gacagggcag ctgctgggtt gctactctcg cctccgccat 60
gattccgccc gcagactctt tgctcaagta cgacacccca gtgctgggtga gccggaacac 120
ggagaaacgg agccccaagg ctcggtact gaaagtcagc cccagcagc ctggaccttc 180
aggttcagcc ccacagccac ccaagaccaa gtcacctca actccctgtg tcccagatcc 240
tacaaagcag gcagaagaaa tcttgaatgc catactaccc ccaagggagt ggggtggaaga 300
cacgcagcta tggatccagc aggtgtccag caccctagc accaggatgg acgtgggtgca 360
cctccaggag cagttagact taaagctgca gcagcggcag gccagggaaa caggcatctg 420
ccctgtccgc agggaaactct actcacagt ttttgatgag ttgatccggg aggtcaccat 480
caactgtgcg gagagggggc tgctgctgct gcgagtcagg gacgagatcc gcatgaccat 540
cgctgcctac cagaccctgt acgagagcag cgtggcggtt ggcatgagga aggcactgca 600
ggctgagcag gggaaatcag acatggagag gaaaatcgca gaattggaga cggaaaagag 660
agacctggag aggcaagtga acgagcagaa ggcaaaatgt gaagccactg agaagcggga 720
gagcgagagg cggcaggtgg aggagaagaa gcacaaatgag gagattcagt tcctgaagcg 780
aacaatcag cagctgaagg cccaactgga aggcattatt gcaccaaaga agtgataatt 840
tccacatgat taatttccaa caagacacyt gggagtattt tactgtgttc ctctggcagc 900
caataaaatc atcataagcc ctttgaata aaaagctagt ttctgagtg aacaagccat 960
aacctcccct aaacaccacc taggtatttg ttagaagtca cactattact ccaatgtcat 1020
cagacaccta aggtctgcc gccaggtcc tggctggcaa tggaagatgg tgtggccctg 1080
ttagtctccg tgtgtggctt actagccagc cttgggaact gccaaactcaa attctaagaa 1140
agccactgct ttctcatcat cactctatac caatacttat ttctggccaa atgaatctgc 1200
ttctctgccc ctcaaacttt tagttcacia ttcatcttct accttaactt ggggsttctt 1260
ggggcctctg gctttcctta attaaatgtc ttntttttcc ctact 1305

<210> 528

<211> 1631

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1628)

<223> n equals a,t,g, or c

<400> 528

gaggcctgcg gcggcagsga gcggcgggac tgggagcggg gcggggagcc gacccgagcc 60
gagccgagcc gagccgagcc ggagcgggag gcgaaggccg gcgcggcgag cagcaaccat 120

```

gtcgggtgttc gggaagctgt tcgggggctgg aggggggtaag gccggcaagg gcggcccgac 180
ccccaggag gccatccagc ggctgcggga caccggaagag atgttaagca agaaacagga 240
gttcctggag aagaaaaatcg agcaggagct gacggccgcc aagaagcacg gcacaaaaaa 300
caagcgcgcg gccctccagg cactgaagcg taagaagagg tatgagaagc agctggcgca 360
gatcgacggc acattatcaa ccatcgagtt ccagcgggag gccctggaga atgccaacac 420
caacaccgag gtgctcaaga acatgggcta tgccgccaag gccatgaagg cggcccatga 480
caacatggac atcgataaag ttgatgagtt aatgcaggac attgtgacc agcaagaact 540
tgcagaggag atttcaacag caatttcgaa acctgtaggg tttggagaag agtttgacga 600
ggatgagctc atggcggaat tagaagaact agaacaggag gaactagaca agaatttgct 660
ggaaatcagt ggacccgaaa cagtccctct accaaatgtt ccctctatag ccctaccatc 720
aaaaccgcgc aagaagaaa aagaggagga cgacgacatg aaggaattgg agaactgggc 780
tggatccatg taatggggtc cagcgctggc tggggccaga cagactgtgg tggcctgcgc 840
agcagcaggc cgtgtgcgtg tgtggggcag gcaggatgtg gtgcaggcag gttccatcgc 900
tttcgactct cactccaaa cagtagggcc gcgttgctgc tctctctctg catagcatgg 960
tctgcacctg ggagatgggc ggggggaggg gggcgggcgg ggtgggaagt gcctgctgtt 1020
tataatgttg aatttctgta aaataaactg tatttgcaaa tccaacattg agcttctgga 1080
ctacgctgac tccactgctg aatcctcaat ggaaagggtc gactggttgc agttgaaatg 1140
acctgaaatg tagcctctgt ccttgtaagt cagttgactt gccgcacatc tctttgtgta 1200
cttgtaacgt actggcagaa aagtcatttt tcaaaagcca taggcttttc cttgccctta 1260
gctgtaataa tgcactctgat ttgatttcc tccagagctg tgtttctgtc catcacctgt 1320
gtattggccc tgtgtttacc actctggccc actcctcacc cccttgctcc cctggctctc 1380
tggagtttgt gacattgatt tgaaatggat ggtgttctct tgagagcaag tgagattgtt 1440
agaattaagt tccaactata cagttttcta acatagctat aaggctcctg ttgctgtttg 1500
tgataactga tagataactc attggaaacg tgcatacatt tatattcaga tgaaattatg 1560
gtttgcactg tctattaaat atctcgatta attttcawaa aaaaaaaaaa aaaaaaccgc 1620
gggggggncc c 1631

```

<210> 529

<211> 1944

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (568)

<223> n equals a,t,g, or c

<400> 529

```

cgcaccctgc cttccggggg ccggacaggg cccgggctgc tgtctcaaga cagccagaca 60
aggagtcttc cttcatggat gaggaggagg aggatgaaat ccgtgtgtga ggcggacagt 120
gggtggccac cgggagctct tggtgcacac ttctccctgc cccaccccca ctatgacctt 180
tgaccctacg gcgcaggggc agccaggacc cttgattcag accatggacc ctggaccttg 240
tagatgaggg acactggcct ggccctcggg tcttcggagg acgtaggggg ctggcatggg 300
tgccgactgg ctgcctgact tcatcatgct ccctgcactt aggtgcgtg ggacaagggc 360
tgtgttgtca cagcaggaat aggttttcct ctgttggcct ccctttcctc caccctggcc 420
tcaaatggat gccagatgcc aacccagtt ctggccacgt acagccagcg ggtagccca 480
gaggcagcct cagctccagg gctaaggact ctcggytccc attttctytg ctggcgcttc 540
tgctgtgccc agcagtggct gctggggnaa gcagctgcag caggaggagg acggtcttgc 600
ctctcagccc ctccctgccc caccacagct cctgccctgg aaatctggag ccccttgagg 660
ctgagctgga cggggggcca gctgcgagca tgtgcactaa acgcagccct ttccagggga 720
agagaacagg atggagaatg gaaggaaagc ccccaggct tcgtgaattg caagaaggga 780

```


cccttccagg atgacactag gaacagggct agggcactcg ctcagtcctt aggggcttgt 840
ttgttcttta ttattgtgtt taaatcctta tagagcaata tcaggatggg gttaataggc 900
ctgcctcaga atgagaatca atccttttag aaaaccttta tactaagcct cctcttcraa 960
attcacagtg gcgattagcg gactggagtc tgggtggcgat tagcggactg gagtctgggg 1020
acatccgtgg caaagacacc agctcaactt tagtgcttcc caactttatt tagaatgaca 1080
tgggggtggg gtctggtgtg tgtgttttcc ctacgcacct cccatagcta ttaacaactg 1140
aggaaggcca gtgcagaata tttttggaga acgatttttt ttttaataaa tatatcattc 1200
ctatgggggg aaagcctttt ttttcttttt ggctgagtta ttccctccct cccctcaata 1260
ccctcagtac tgactacttc ctttcttttt ctcaggcctc ccccaccca cttttgaggc 1320
cagggttggc cagatttagc aaaacaaaaa cagagtgtct agttaaacgc aaatttcagg 1380
taaacaaaaa ataattttct agcattaata tgccccacgc aatatttggg aacttatgt 1440
gaaaaatgat ttgtttttct gaaattyacg tttctctctg agtcctgtaa ctgtccccga 1500
ggggattgag cagaagctcg ggtatgagcc ctgaggttga ctgccggtta tttttctgtc 1560
ctgggaacag cctgaccac ctcctgtct ccatgtagcc agtgrgggga gggggagaca 1620
cagaaccaac cacagccagg ggcgtcccca tggcgactgt ggccgggcc ctcctctctt 1680
gcctgactct cctctcttgc ctgactctag aactaactt agttccagg tccgtgccct 1740
gttggtgctc ctgtttccaa tagcttaggt cccatggtgg gggaggaacc tcagggttat 1800
gcagccccc cagctgccc tcraatcccg tccaggccar ttccagattc taaactgatt 1860
tttttcatga tattgtcaaa acagtgagga aacattaaaa aaaaagccct aaagcaaaaa 1920
aaaaaaaaa aaaaaaaaaa aaaa 1944

<210> 530

<211> 1425

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1409)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1411)

<223> n equals a,t,g, or c

<400> 530

ggcacgagtg acggaagtgc ctctatcttg ttgccggraa gtgggaagag agaaagggtt 60
tgatggcggc tatagctgca tccgaggtgc tggtaggacg cgcgaggag gggtcctcg 120
ctgcggcggc ggagctggcc gctcagaagc gcgaacagag actgcgcaa ttccgggagc 180
tgcacctgat gcggaatgaa gctcgtaaat taaatcacca ggaagtgtgt gaagaagata 240
aaagactaaa attacctgca aattgggaag ccaaaaaagc tcgtttggag tgggaactaa 300
aggaagagga aaagaaaaag gaatgtgcgg caagaggaga agactatgag aaagtgaagt 360
tgctggagat cagtgcagaa gatgcagaaa gatgggagag gaaaaagaag aggaaaaacc 420
ctgatctggg attttcagat tatgtgtctg cccagttacg ccagtatcat cggttgacca 480
agcagatcaa acctgacatg gaaacatatg agagactgag agaaaaacat ggagaagagt 540
ttttcccaac atccaatagt cttcttcatg gaacacatgt gccttccaca gaggaattg 600
acaggatggg catagatctg gaaaaacaga ttgaaaaacg agacaaatat agccggagac 660
gtccttataa tgatgatgca gatatcgact acattaatga aaggaatgcc aaattcaaca 720
agaaagctga aagattctat gggaaataca cagctgaaat taaacagaat ttggaaagag 780
gaacagctgt ctaatccctt caagaactgt ttatagaagc ttgagaatgg ggtaaaaatt 840

```

tctgctagca aaatcaagtt ctttttgaaa ttttatcagt aatccagaat ttagtagtcc 900
atgccttctc actcagcatt tagaaataaa aatgtggttt cttaaacgta tatcctttca 960
tgtatatttc cacatttttg tgcttgata taagatgtat ttctttagt gaagtgttt 1020
tgtaatctac tttgtataca ttctaattat attatttttc tatgtatttt aaatgtatat 1080
ggctgtttta tctttgaagc attttgggct taagattgcc agcagcacac atcagatgca 1140
gtcattgttg ctatcagtgt ggaatttgat agagtctaga ctcgggccac ttggagtgt 1200
gtactccaaa gctaaggaca gtgatgagga agatggcagt ggccaccgga ggactggagc 1260
agtccctcct catggcggcc tgtgaccaag gtcggggagg agtggagcta tccttccatg 1320
atctgatcat gtacagtcc ctttttaaaa agcaataaat gcttgggatt agaatttcaa 1380
aaaaaaaaaa aaactcgggg ggggccccnt nccccattgg ccctt 1425

```

<210> 531

<211> 1466

<212> DNA

<213> Homo sapiens

<400> 531

```

tgggtggagga ccttttgaa acttgtggtt cccccgggct gcaggaattc ggcacgaatg 60
ctggggtgca gcttcaagct taggaccacc caccatgcct atccagggtc tgaaggccct 120
gaccatcact cattaagaac agaggaggct gcctgttact cctgggtgtg catccctcca 180
gacactctgc tgtttcctgc ctaggcgtgg ctgcagccat ggctaggaaa gcgctgccac 240
ccaccacct gggccagagc tggttctgct cctgctgcag ggacactgag ctggctatct 300
cggcgcttcg ggcaagaact gcaacaggct ctccctgggtc ctgcagggtg acagccgggc 360
ccctgccttg tgcctcagct ctgcagagct gctgctgccg ggtgacctga tccaacctga 420
taagtgcca tcttcagcta ccactgcaag gccctgaggg caacagcagc acggcactgc 480
ccaccggct gctgatggcc tggtgccagc tgggagtcct cccggcactt cgaggccact 540
gagccaccct tccagcccca gccaccatg gacaggggta tccagcttcc tcctcaacct 600
cgtcctctgc ccctgagcca gtgacgcccc aggacatgcc tgttaccag gtcctgtacc 660
agcactagct ggtcaagggc atgacagtgc tggaggccgt cttggagatc caggccatca 720
ctggcagcag gctgctctcc atggtgccag ggcccggcag gccaccaggc tcatgctggg 780
acccaaccca gtgcacaagg acttggctgc tgagccacac acccaggaga aggtggataa 840
gtgggctacc aagggtcttc tgcaggctag gggaggagcc acccccgctt ccctattgtg 900
accaggccta tggggaggag ctgtccatac gccaccgtga gacctgggcc tggctctcaa 960
ggacagacac cgcttgccct ggtgctccag ggtgaaagca ggccagaatc ctgggggagc 1020
tgctcctggt ttgagctgca ttcaggaagt gcgggacatg gtaggggagg caaaaagcct 1080
tgggcactac cctccctgtg gagctgttcg gtgtccgtcg agctagccac accctgacac 1140
catgttcaag ggtaccgga gagagggtg tctgccccca acctccctg tgggtgtcac 1200
tggccagatg tcatgaggga agcaggcctt gtgagtggac actgaccatg agtccctggg 1260
gggagtgatc cccagggcat cgtgtgccat gttgcacttc tgcccaggca gcagggtggg 1320
tgggtacat gggtgccac ccctccacca catggggccc caaagcactg caggccaagc 1380
agggcaaccc cacacccttg acataaaagc atcttgaagc ttttaaaaaa aaaaaaaaaa 1440
aaaaaaaaaa aaaaaaaaaa aaaaaa 1466

```

<210> 532

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 532

```

gctcgtgccg attcggcacg agatggaggc agcggtagcc cagtgtctga gtgggtgccg 60
ggtctccatg gagaagcggc tcgccagtgt cccaggctgc tgagctctcg ccgcccgaga 120

```

```
ccccgcggcg cgccgcagc gccatgctag ccttgcgcgt ggcgcgcggc tcgtgggggg 180
ccctgcgcgg cgccgcttgg gctccgggaa cgcggccgag taagcgascg cctgctgggc 240
cctgctgcgg cccgtgccct gctgcttggg ctgcctggcc gaacgctgga ggctgcgtcc 300
ggccgctctt ggcttgcggc tgcccgggat cgkccagcgg aaccactgtt cgggcgcggg 360
gaaggcggct cccaggccag cgyaykcg ggccgcgctg ccgaagcccc gggcgkccag 420
tggggcccgg cgagcacccc cagcctgtat gaaaacccat ggacaatccc gaatatgttg 480
tcaatgacga gaattggctt ggccccagtt ctgggctatt tgattattga agaagatttt 540
aatattgcac taggagtttt tgcttttagc ggactaacag atttgttgga tggatttatt 600
gctcgaaact gggccaatca aagatcagct ttgggaagtg ctcttgatcc acttgctgat 660
aaaatactta tcagtatctt atatgttagc ttgacctatg cagatcttat tccagttcca 720
cttacttaca tgatctttt gagagatgta atgttgattg ctgctgtttt ttatgtcaga 780
taccgaactc ttccaacacc acgaacactt gccaaagtatt tcaatccttg ctatgccact 840
gctaggttaa aaccaacatt catcagcaag gtgaatacag cagtccagtt aatcttgggtg 900
gcagcttctt tggcagctcc agttttcaac tatgctgaca gcatttatct tcagatacta 960
tggtgtttta cagctttcac cacagctgca tcagcttata gttactatca ttatggccgg 1020
aagactgttc aggtgataaa agactgatga aagtcatccc tcaactgttag taaggaaagca 1080
gtatacatca atgggaacag ggcccatgga aatgtacagg agtttcccta ttttgggtgt 1140
cagcttgaaa aaggacttgt cagaatcaac tgtgtcatca aaatttaagt aatgtgcatt 1200
gaaaataagg ttgatcatgg gaatatgcag aatttccaat gtatttttaa atacaaataa 1260
aattgtaatt tagaattttt aaatcttagg tttcttgatt aatttataag agatcaatta 1320
ttgtcagtct tttttgtatg ttttttaaaa acatagtcca gagcatgggc agaattgaca 1380
cctctctttt aagtgaattt tggattgctc acaaagcact aggaaatgtc atggggttca 1440
aatatatatc cyacacaact gggcaatata tttttgtttg attttttaggt ctgtgtatac 1500
attaacagtt catgtaatta ataccgcatc atttgggata atgaaagtga agttagttgt 1560
agatgaagta aagttataaa agagattaaa aatgatcagg tattaattac atgaactgtt 1620
aatgaatcca ggttccaata tcaacaaaca ttgctatg 1658
```

<210> 533

<211> 2857

<212> DNA

<213> Homo sapiens

<400> 533

```
ggcacgagcc tttctgaaga ttaaaaaaca aataaaaagt tgagaagaaa gagcacgaag 60
agtagaaggg aacaatggtg tactcgccag caatggcaat acgggttatt aaaaagaagg 120
gtgggggcgg ggaaccctgg ccgactcagg acgccacggg aggaagccac gcaaaatagc 180
aaaccgggat cctagagggg cggggccccc ctcagcgcgc aggcgcaacc agggccaggt 240
ggccgcccgg gaagcgaacc acctatacgc gccgcgcgcg ttgggtctcc tgcgcagtcg 300
cagacascct cgctggaggc ttcatctttg ccgcgcgtgc cgtcgccttc ctgggatttg 360
agtctcgagc tttcttcggt cgttcgycgg cgggttcgcg cccttctcgc gcctcggggc 420
tgcgaggctg ggaaggggt tggagggggc tggtgatcgc cgcgtttaag ttgcgctcgg 480
ggcgcccatg tcggccggcg aggtcgagcg cctagtgtcg gagctgagcg gcgggaccgg 540
aggggatgag gaggaagagt ggctctatgg cgatgaaaat gaagtgaaga ggccagaaga 600
agaaaaatgcc agtgctaate ctccatcttg aattgaagat gaaactgctg aaaatgggtg 660
accaaaaccg aaagtgactg agaccgaaga tgatagtgat agtgacagcg atgatgatga 720
agatgatgtt catgtcacta taggagacat taaaacggga gcaccacagt atgggagtta 780
tggtacagca cctgtaaatc ttaacatcaa gacaggggga agagtttatg gaactacagg 840
gacaaaagtc aaaggagtag accttgatgc acctggaagc attaatggag ttccactctt 900
agaggtagat ttggattctt ttgaagataa ccctggcgt aaacctgggt ctgatctttc 960
tgattatttt aattatgggt ttaatgaaga tacctggaaa gcttactgtg aaaaacaaaa 1020
gaggatacga atgggacttg aagttatacc agtaacctct actacaaata aaattacggg 1080
```

```

acagcagggga agaactggaa actcagagaa agaaactgcc cttccatcta caaaagctga 1140
gtttacttct cctccttctt tgttcaagac tgggcttcca ccgagcagga gattacctgg 1200
ggcaattgat gttatcggtc agactataac tatcagccga gtagaaggca ggcgacgggc 1260
aaatgagaac agcaacatac aggtcctttc tgaaagatct gctactgaag tagacaacaa 1320
ttttagcaaa ccacctccgt ttttccctcc aggagctcct cccactcacc ttccacctcc 1380
tccatttctt ccacctcctc cgactgtcag cactgctcca cctctgattc caccaccggg 1440
ttttcctcct ccaccaggcg ctccacctcc atctcttata ccaacaatag aaagtggaca 1500
ttcctctggg tatgatagtc gttctgcacg tgcatttcca tatggcaatg ttgcctttcc 1560
ccatcttctt ggttctgctc cttcgtggcc tagtcttggt gacaccagca agcagtggga 1620
ctattatgcc agaagagaga aagaccgaga tagagagaga gacagagaca gagagcgaga 1680
ccgtgatcgg gacagagaaa gagaacgcac cagagagaga gagagggagc gtgatcacag 1740
tcctacacca agtggtttca acagcgatga agaacgatac agatacaggg aatatgcaga 1800
aagaggttat gagcgtcaca gagcaagtcg agaaaaagaa gaacgacata gagaaagacg 1860
acacagggag aaagaggaaa ccagacataa gtcttctcga agtaaatagta gacgtcgcca 1920
tgaaaagtga gaaggagata gtcacaggag acacaaacac aaaaaatcta aaagaagcaa 1980
agaaggaaaa gaagcgggca gtgagcctgc ccctgaacag gagagcaccg aagctacacc 2040
tgcagaatag gcatggtttt ggccttttgt gtatattagt accagaagta gatactataa 2100
atcttgttat tttctggat aatgtttaag aaatttacct taaatcttgt tctgtttgtt 2160
agtatgaaaa gttaactttt tttccaaaat aaaagagtga atttttcatg ttaagttaaa 2220
aatctttgtc ttgtactatt tcaaaaataa aaagacagca atgactttat atccaagaaa 2280
ggaatgtgaa tgagtcactt aacagggaat ctaaagagct gtgttagctg tgtacataca 2340
cagattatct gagaaaaggc caagggttcc acttgggcca cagttttttt gttaatcaaa 2400
caccactctc ttaagaggct gcaccacaaa aggcaacaaa gggccctctt aaggcttgag 2460
attaaaaacta gtctttatca ttactgctgt gacactcttg cttagtataa taagagactc 2520
atacatTTTT gatatacaaa ctttttgatg gcttttcaat attctaaatt tgggttcctg 2580
gtgaaaccaa atggggtaca ctttcatatc caaattaata aaacctataa ggcattctggg 2640
tggcctctat gaaataaatt aattacccat agtgtagttt ctaggaggca tgtgtacaca 2700
cactcttcat tgtggcacia atttaaattc cctcatgacc atgtctgtga gccaggggtca 2760
agctggtttg gccttcttgs atgcattttc caaggccac tggtgaggag agccatggag 2820
tttttyatac agttacttaa cgkttgtggg aataaaa 2857

```

<210> 534

<211> 1335

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1334)

<223> n equals a,t,g, or c

<400> 534

```

atttccatc ttagataatg gtccgtccc gcaanacttt gagattggac aagaagatgt 60
tactaaagag aagttccttt aaaaggtctt gttcttgtgt caaaaagctg caagtttggt 120
ttgttctcgt gtgtgatcat gagtgcacia tgaagaagac ctagatgct gcatttttta 180
gctctgaaga ttccttaggt atccctgaag acagctcgct cagatgatca gcatttagag 240

```

```

tgaaaacaag ggcccttcat ggggtgaacat tagaaagagc caggggtcaa agctggcgaa 300
tggatgacgc accctagcca ctggccctc tctgtttcat gtatttccaa aagttgtaaa 360
ctttgatggc tgatttttcg taagtcaggt ttctaagtga gctccctgag gtgccaaggc 420
catggtgtcc gccctgctgc gtctgttcgt cagctgagtt ccttgtgaat ctctgtttta 480
gggtttgggg ctagtgtgtt tgtgtttcca ttctaagatt gagtctggca gtccctgttt 540
ttttgcattg gggtaactgc tctttgattt tttttaattg cagtatttgt gtgattgcaa 600
taataaagtt tggtttggtt tttacagtca tgcgcaggga cgatccttgt tctctgctgt 660
aaactgtaaa aagtttatgg agacttaaaag tcttgatgtt gtgaagcaga gggtattttg 720
tggaaagatt aaaaggattt tgttgggtacc tggttttgtg ttgtgtatat atacatgagg 780
ttgaacagtg aaaggaaaagtc agtagtgga tgttagaagg gtaactatga caaagatact 840
tttgagataa catttaaaag tactttatat tttacataat agcatgtttc attttgatta 900
aaagtagcca aaggaatttt gatcatggca taagtgttta aagcaatatt ttctggaata 960
taccaagttt atataatttg attttgtgct aaattattaa gagtctcttt ttgaaacatg 1020
cgggtttgaa atatgacacc ttgtgggttt ccatattaaa atcctcactc ttttaattgtc 1080
atctctatct ttgaaaattt tcatttatga ttcccatgat atgtggtcta agaaagacca 1140
aacagatttc tatttttttt tcttataagt tcgttgtgtc tagagattgt taatattgta 1200
atttaatgta gacttacttt gaataaaaatt agtttaattg gccttaaaat tacattaata 1260
aaactttgtg atatgcaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1320
aaaaaaaaaa aaana 1335

```

<210> 535

<211> 2818

<212> DNA

<213> Homo sapiens

<400> 535

```

gggaagtggg ggttaaggga tgactgtatt tccactagca tattatgcct gcattttcttg 60
cttttagattg tgaaagtcac catggatata catttgaatg aaatggctgg agacatcttg 120
gtttttctga ctggccagtt tgaaatagaa aaaagtgtgt agttactttt tcagatggca 180
gagtctgttg attatgatta tgatgttcaa gataccacc tccgatggct tgtaaatatt 240
gccgtgttat ggatcaatga caacagatca acagaggarg atatttttgc caccaccacc 300
tggaattara aaatgtgtca tatccaccaa tttttctgca acgtctttga caatagatgg 360
aatcagatat gtggtagatg gtggcttcgt gaagcagtta aatcacaacc ccagattagg 420
gttgacatc ctggagggtg ttccaatttc aaagagcgag gcattacagc gaagtggccg 480
agctggcagg acttcttcag gaaaatgctt tcggatctat agtaaagatt ttkggaacca 540
gtgtatgcct gaccatgtga tccctgaaat taagagaact agtttgacat ctgtagttct 600
gaccttaaa tgacctgcca tacrcgatgt cataagggtt cccyatttg atccacctaa 660
tgagagactt attttagaag ctcttaaaaca actttaccag tgtgatgcta ttgacaggag 720
tggccatgtc accagattgg gtttgtctat ggtggagttt cctttgcctc cacatctgac 780
atgtgcagta ataaaagctg cttccctgga ttgtgaagat ctactacttc caatagcagc 840
aatgttgtct gtggaaaacg tcttcattag acctgttgat ccagagtacc agaaggaagc 900
agaacagaga catcgagaat tggcagctaa agctggagga tttaatgact ttgcaacttt 960
agctgtcatc tttgaacaat gcaaatcaag tggagctcca gcttcatggg gccaaaaaca 1020
ctggattcat tggagggtgt tattttctgc atttcgtgtg gaagctcaac ttcgagaact 1080
aatcaggaag cttaaacagc aaagtgtatc caaaagaga cctttgaagg ccctaaacat 1140
gaagtactac gaagatgtct ttgtgcgggc tatttcaaaa atgtagctcg aagatctgtt 1200
ggggaacgt tttgcacaat ggatggctgt ggaagcccag ttcacattca tccttcctca 1260
gcacttcatt aacaggaaac caaacttgaa tggatcattt ttcattgagg attggttacc 1320
accaagtct acgcaagaat tgtatgcccc atccgttatg aatgggtaag agacttgta 1380
cccaagtgc atgaatttaa tgcacatgat ttgagcagtg tggcccgcg tgaagtgaga 1440
gaagatgcaa gaaggagatg gacaaataag gaaaatgtaa agcagctaaa ggatggaata 1500

```

tcgaaagacg tcttaaagaa aatgcaaaga agaaatgatg acaaatccat atctgatgca 1560
cgggctcggt tccttgagag aaagcagcag aggacccagg accacagtga cacacgaaaag 1620
gaaacaggct aagggtggtga accctccaat tcaggaagtg ggaaaaggag ccaggaaaatg 1680
tgcttctact ttgccagtta tttcagacag cactaccaag aggaggtggt cagcacttgt 1740
tattggccta tgaactaaaa gcaaatacaa gctcataaat caaagctcat cagttcccat 1800
aaatgcagtt gtcaaagaaa agatttggtt gccatagtca taagcaatga tacatgaaac 1860
caatgaaaga cagtacatgt aataatattt tcctcagtac aattttgctg gccttaactg 1920
gtatcaaacg ctgtcattga gatgttttca aagaacattg agttgtattt aatcagcgtg 1980
tactccattt gcattgaagc attaaaaatt atttttctta aaatctcttt aaggccttct 2040
tgttgctggt agaatagtgc tatatatcag gtatgtgacc atttatttca gaaggctgaa 2100
cataagaggt ttctactcag caatacttag atgtctaact gtttaattgc tacagagctt 2160
tatagatatt tagagaaaag acttaataca ttagtaaaata aaattgccta tggcaggatt 2220
ctttcttgaa ttaataattaa tccttaaaatt gatttttctg ggattatata aattcctttt 2280
tatataaaaag tatattgttt aaaacagtag ctatagccat taaccaaagg acagatgata 2340
tatatatata tgatatatat atatatataa gttctttttt agctgtacct acgtacttat 2400
atcagcacca tgtatgtagg tgtgatagta ctttcaaaca gcgcctccac ctggcctact 2460
ctgttatttc cacctgtttg ggtagggcca ttttaacttc attatgcca acttgggatg 2520
ggattttcga agcagacaac actatttcat cgtgtttcaa attggaacct tgaggctagt 2580
tagtatcaca ctcaggccac actcagcact tgcccactct tgtttactgc cttgtattct 2640
agttatttgt gtatttgtct ccctcactag attatacgct ccttggtggc agggactgtg 2700
tcttttttca tctttgtatc tttcatgcac ctatagcatg gctttgcaca tagtagtcac 2760
tcagtgtttg ttaaataaag ctattagtgt cattaaaatt caaaagmcar waaaaaaa 2818

<210> 536

<211> 1397

<212> DNA

<213> Homo sapiens

<400> 536

ctcatttagg tgacactata gaaggtacgc ctgcaggtag cggttccgga attcccgggt 60
cgacccacgc gtcckaggcg ggatggtgcc gctgtgccag gttgaagtat tgtattttgc 120
aaaaagtgcg gaaataacag gagttcgttc agagaccatt tctgtgcctc aagaaataaa 180
agcgttgacg ctgtggaagg agatagaaac tcgacatcct ggattggctg atgttagaaa 240
tcagataata tttgctgttc gtcaagaata tgtcgagctt ggagatcagc tcctcgtgct 300
tcagcctgga gacgaaattg ccgttatccc ccccataggt ggaggatagt gcttttgagc 360
catctaggaa agatatggat gaagtgaag agaaatctaa agatgttata aactttactg 420
ccgagaaact ttcagtagat gaagtctcac agttggtgat ttctccgctc tgtggtgcaa 480
tatccctatt tgtagggact acaagaaata actttgaagg gaaaaaagtc attagcttag 540
aatatgaagc atatctaccc atggcggaaa atgaagtcag aaagatttgt agtgacatta 600
ggcagaaatg gccagtcaaa cacatagcag tgtccatag acttggttg gttccagtgt 660
cagaagcaag cataatcatt gctgtgtcct cagcccacag agctgcatct cttgaagctg 720
tgagctatgc cattgatact ttaaaagcca aggtgcccatt atggaaaaag gaaatatacg 780
aagagtcac aacttggaag ggaaacaaaag agtgcttttg ggcattccaac agttaatcac 840
ttatgttttt agagcatgca atcttaactt tgttaacta ttattattga tcacattttg 900
atttttttct ctccacatca ggatagttta ctgaagcaca atctcttata ctagtgggac 960
aaaagggaga aaaaggaagc aagataaatg ggtatgtagg atgaaggggt atttaaaatg 1020
gaactaaaga tagaaggagg actgtaggaa gaaatggaat aatttaaatg tgaggaaaag 1080
tatctgtggt agacatgtcc ttccatgact aatttctaatt tgtaactcaa cacacattga 1140
ggtatgggcc ctctcagtg actttaacta gtcagaaaac gtactcccc accaacccca 1200
cctcaccgcc ccccatcccc gttctgggag agcattgtta ttaaggatgc atgacaggaa 1260
tgttggcaga actggaaggt attaaaaaag cattatcaga cagtcttgat attatacatt 1320

ttcagaaata tattaaaaat aataaaactaa aacccatgat ttcaaaaagtt taaaaaaaaa 1380
aaaaggcgcgc cgcaagc 1397

<210> 537

<211> 1233

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1111)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1122)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1137)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1202)

<223> n equals a,t,g, or c

<400> 537

ctgattctga agacaatcct cagactttac ttttttctgc aacttgccca cagtgggtat 60
acaaaagtgc aaaaaaatac atgaaatcca gatatgaaca ggttgascct gttggaaaaa 120
tgactcaaaa ggttgcaact actgtggaac atttggccat ccagtgtcat tggcttcaga 180
ggccagcagt tattggagat gtccttcaag tctacagtgg gtctgaaggg agggctatta 240
ttttctgtga gaccaagaag aatgtaactg aaatggccat gaatccacac ataaaacaga 300
atgcccagtg tttacatggg gacattgcac agtcacaaag agaaattaca ctaaaaggct 360
tcagagaagg tagtttttaa gttttgggtg caaccaatgt ggctgcccgt ggtttgga 420
ttcctgaagt tgacctgggt attcaaagtt ctctcctca ggatgttgag tccatatatcc 480
atcgctctgg acgcacaggt agagctggac ggacagggat ttgtatatgt ttttatcaac 540
caagagaaaag aggtcaacta agatatgtgg aacaaaaagc aggaattact tttaaactg 600
taggtgttcc ttctacaatg gatattagtt aatctaaaag catggatgcc atcaggtctc 660
tggtctccgt ttcttatgct gctgttgatt ttttccgacc atcagctcag agactgatag 720
aagagaaaag tgcagtggat gcattggctg cagcttttagc ccacatttct ggtgcatcaa 780
gctttgaacc acgatctttg atcacctctg ataaggggtt tgtgaccatg actctggaaa 840
gcctagagga aatacaggat gtcagctgtg cttggaaaaga acttaacaga aagctgagta 900
gtaatgcagt gtctcagatt accagaatgt gcctcctgaa aggraatatg ggtgtttgct 960
ttgatgttcc tacaactgag tcagaaaggt tacaggcaga gtggcatgat tccgactgga 1020
tactctcagt gccagccaaa ttacctgaaa ttgaagaata ttatgatgga aacacatctt 1080
ctaattccag acagaggagt ggctgggtcaa ntggctgatc angccgggtca gcgkgtncag 1140
gtggctcgatc tggcggcggt cagtagacag atcgacaagg agtcgctcag gaatcgacaa 1200
gnggtagaga gatgggaata gaatcgatca aga 1233

<210> 538
<211> 1016
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c

<400> 538
acagggtgcgt gccaccacgc ccagctaaat tttgtatttt tagtggagac ggggtttcac 60
catgttggtcc aggatgggtct caatctcctg accctgcgat ctgcccacct cagcctccca 120
aagtgtctggg attacaggcg taacacncgg gcctggcctg ttttatgatt cttaatagtt 180
acttggttta aatcacattt gatactatcc ttctgaaaag tctgagacag atctacaaac 240
tacagtcaaa attatagatt aagaggaatg aatgcaccta tttggcttta agttgaagat 300
gaattatttc tcatgtctcat tttcttgccg cagttatctt agaaagacct ccaaaggctt 360
tgtgattgta agcactgtca tgatcacaga atgcaagctt ctggtacctat gatcctcaac 420
ttagagagga agaaaccaag acagagagct taactcactt ctctcaggga aaattaggag 480
ttgagcacag gacaggaaat gggctttgcc acttttagct ccaggctttt ctaaccagac 540
ttgatttctct catgttctag aaagatcact aatggtcaag tggaacaagc actacacgac 600
taacccttat tggggttttt aacttaaggg aggctaattt ttaattttaa ctgctcgaga 660
tatgagttct gcaaaagggtg gtccgcaccc ttggccctct ggacattatc actaaattgc 720
ttgtgcctgt taacaagaat actgaccaga atgctcttca tgtagcttat acagttggtt 780
cacttcatgc ggttcttgac atgtttattt ctacccttaa tgcaatgaaa tgtttcatta 840
ataaaaaacc actttatata aaattgctct agaagtcata tgtcattgga tgtcctgttg 900
tttatggagt ttccctggaa agatgttcct tgacagatgc agccctgagt cacacacttg 960
ggccatgtct gatctagagt tcgctgtagt ggacagttac aatcagccct cgtgcc 1016

<210> 539
<211> 1679
<212> DNA
<213> Homo sapiens

<400> 539
ggcacgagcg gatgggaggg acgggcgtgg aggacgccga gcaccgtggc gcgcgctcac 60
gtccgcgtcc ccaagggtct cgctccctca agcgcaagtgc ccagaactcg gagccagccc 120
ggcccggggg accctgctgg ccaaggaggt cgtcagtcct gtcttgtctt ccagaccggg 180
aggaccgaag ctcccgagcg acgaggaacc gccaacatg gcctcggaga gtgggaagct 240
ttgggggtggc cgggttgtgg gtgcagtggg ccccatcatg gagaagttca acgcgtccat 300
tgcttacgac cggcaccttt gggaggtgga tgttcaaggc agcaaaacct acagcagggg 360
cctggagaag gcagggtctc tcaccaaggc cgagatggac cagatactcc atggcctaga 420
caaggtggct gaggagtggg cccagggcac cttcaaactg aactccaatg atgaggacat 480
ccacacagcc aatgagcgcc gcctgaagga gctcattggt gcaacggcag ggaagctgca 540
cacgggacgg agccggaatg accagggtgg cacagacctc aggtgtgga tgcggcagac 600
ctgctccacg ctctcgggccc tcctctggga gctcattagg accatggtgg atcgggcaga 660
ggcggaacgt gatgttctct tcccggggta caccatttg cagagggccc agcccatccg 720
ctggagccac tggattctga gccacgcccgt ggcactgacc cgagactctg agcggctgct 780
ggaggtgcgg aagcggatca atgtcctgcc cctggggagt gggggcattg caggcaatcc 840
cctgggtgtg gaccgagagc tgctccgagc agaactcaac tttggggcca tcaactctca 900
cagcatggat gccactagtg agcgggactt tgtggccgag ttcctgttct gggtctcgct 960

gtgcatgacc catctcagca ggatggccga ggacctcatc ctctactgca ccaaggaatt 1020
cagcttcgtg cagctctcag atgcctacag cacgggaagc agcctgatgc cccagaagaa 1080
aaaccccgac agtttgagc tgatccggag caaggctggg cgtgtgtttg ggcgggtgtgc 1140
cgggctcctg atgacctca agggacttcc cagcacctac aacaaagact tacaggagga 1200
caaggaagct gtgtttgaag tgtcagacac tatgagtgcc gtgctccagg tggccactgg 1260
cgtcatctct acgctgcaga ttcaccaaga gaacatggga caggctctca gccccgacat 1320
gctggccact gaccttgccct attacctggg ccgcaaaggg atgccattcc gccaggccca 1380
cgaggcctcc gggaaagctg tgttcatggc cgagaccaag ggggtcgccc tcaaccagct 1440
gtcactgcag gagctgcaga ccatcagccc cctgttctcg ggcgacgtga tctgcgtgtg 1500
ggactacggg cacagtgtgg agcagtatgg tgccctgggc gactgcgcg ctccagcgtc 1560
gactggcaga tccgccaggt gcgggcgcta ctgcaggcac agcaggccta ggtcctccca 1620
cacctgcccc ctaataaagt gggcgcgaga ggaaaaaaa aaaaraaaaa aaaagttct 1679

<210> 540

<211> 1080

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (970)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (978)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1027)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1044)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1067)

<223> n equals a,t,g, or c

<400> 540

aaaatgtata aaacgcccac ttctctgaat gaagtcttgg tgaactgccc acagaccctt 60
ccagcgatga gcctgtcttc cacatttccc acattgatcg ggtctacacc ctccgaacag 120
acaacattaa tgagaggacc acctgggtgc agaagatcaa ggcggcgctct gagcagtaca 180
tcgacaccga gaagaagaag cgtgagaaag cttaccaagc ccgctcccaa aagacttcag 240
gcattgggcg cctgatggtg catgtcattg aagctacaga attaaaagcc tgcaaaccaa 300
atggaaagag caaccatac tgtgaaatca gcatgggctc ccagagctac accaccagga 360
ccatccagga cactcactcaat cccaagtggg attttaactg ccagttcttt attaaggatc 420

tctaccaaga cgtgctgtgt ctcaccctgt ttgacagaga ccagttttca ccagatgatt 480
tcctgggtcg tactgaaatt ccagtggcaa aaattcgaac agaacaggaa agcaaaggcc 540
ctatgacccg ccgactgctg ctgcatgagg tccccaccgg ggaggtctgg gtccgttttg 600
acctgcagct ttttgagcaa aaaactctcc tgtaggggtt ctaaaggaca gcaccagcgg 660
gacagcccac aaggctgggg ctggagaatg agagactgcg ctctcttggg gctgagggag 720
caccatgcag cttcaccctt cacaagcca tgcacgctgg gggctctgtt ttcctgcaca 780
ctaaatagct agcaatctat gcaaacacct ttcccataaa gaaaccaaacc cccatagtac 840
agtgccttgt cctagtgttc acatgttcag ctctgtttgt ttagatgcc aaggttccat 900
tttcagggtc ataaaaagta ttacttggga aatgagggca tcagaccacc agatgttacc 960
gytcggttgn aatgtgtnc accgtggagt kggtttgggt gacgctgtta accattccac 1020
ggcatgnacc ctcttgctgg ggtncacagc ccatttcagg gaggggnaag ggttcagggt 1080

<210> 541

<211> 2259

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2213)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2242)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2247)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2250)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2253)

<223> n equals a,t,g, or c

<400> 541

ccgcagccca tctgctggca tcaktacctg gtgttgggac agcaggatag gkttctaaag 60
gtgggttttyt atccaaacga ccaaaaaacc aacagtaaca ccagtgaac cccacactgt 120
cgggcttata aaaatctgtg ccatcatggt gattttatcc aagactgctc cacttaccac 180
agtgtggggg acaagtcttct gttgaaactt tagatagcag aattatttgc aatttgtagc 240
atagaaaaga tttttaaaatt tttttacaaa aggtttttaa acagattagg gtaggtgatg 300
gtttaaatca attaatgggc attggaacc tagggtttcc ttttgattaa gagccttttt 360
tgtttctgct ctttctcagc tttcagggga gaaggaggcc actggaaaat tatttccta 420
agtgcaggct gttgactgcg tatgccaaaa agggacagga ggcatgggat agcagggtctg 480

gtgacacagc tagggctctc ctagcagctc ctccctctcc ctcccaaggc cccaggaat 540
cccttcctcc catgtcctgg cagcaggacc ccaggctaca tatggaaggt agagatgtgg 600
gggtcctgtr tcctggagta ttatgtctcc ccacctctg cagttttctc tgaacatgta 660
tggtgcccac ggtgggagcg tggctactgt gcagttgtgc acagatgtct ttcctttacc 720
ggtggccttt ctgtctgcct ctccctctcc tctgcagccc aaatggaaaa caattattta 780
ctccattgga gggaaaaggaa gagtcctaga attcctaagg gaaccttagc ataaagggtt 840
tggggaagga ggccgtaggc sccggaggaa gcaattccac ttggtttgac aacttctgcc 900
actcccatgt cagatgactt gcacttctta aagagattgc tttataacac taagacatcc 960
tttctaaaga ttcaagtgga cttgactaag ctgagggtcc acgaaataga atatgacatg 1020
tgagctgttt ttgaaaaacg aagatggaga gagcacttcc ccgtaacgaa agcaaagtgg 1080
taagcacagg gtgagaccct tttacacaga atgggtggaga gaaaagagaa tgctgaaaag 1140
tggtcagat gcagagtgtt ctgtggagaa actgcagccc cacttctgtt tccctggagt 1200
ctccaatgg atcattcagg agtgcctat gtgagaattg agccaaggaa aatactcatg 1260
caaccagcct gagtcgcggt gaggggacga gaggtgttac acacattggt agttattttg 1320
caccagcagt gcctttctca ctgggggtac ttggaccctc agatcttctt ttctaatagc 1380
catttgccac cccaagtggg atgtcggcca tttctcctta aaacaccttc cctacctttc 1440
ccatgtactc agtttagctc tcaaagaagg ggtgaatcat aaagccagtg aaaatttcac 1500
cctctgaggg agttcccaa tctgaagggg aagagggtga cctcagcggc ttttctccca 1560
aaaatcggct gaaggctggt tgtggatcct tgctcctctc ctgaccccat ctggctgctg 1620
ccccgtctcc caccctgtc cccggggctc gctggccctg cactccgcct tagtcctggg 1680
gccggcgaca cagtgggggc tcctcacttg ctgcagtgtc atagcaataa aatgtgattc 1740
ttgggggtccc ccaggaggc tgcccatggc tttatttatg aacctgggtt tcgggagtca 1800
ggggaggaga tgactttgct tctgtgcaca gccccgtctt ccaggagcca cgactcagaa 1860
gaaaagggtg ctcagacttt tgttatacac atttgctttg tgtaataaaa tgtttacaat 1920
tttatatgaa agatggaata agcgtagag cttccaactg tatatttttt acttttatag 1980
attttaaaac tatgatcctt tatatgtgtg ttttggggga gctatgataa gttttatggc 2040
aaacggttg tattgttaac tttttattgt catcaaaagt tcataaaagt cctattaatc 2100
cccatattct tctactgccc ttaactctgg tatacaccaa aaagaaatct ttactttcct 2160
tgttttatca ttataaaaat aaagtatttt gctagtatgg aaaaaacctt tgnatttgac 2220
gtcacctggg gtctgctggc anaaagnttn ggngaattg 2259

<210> 542

<211> 1347

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1290)

<223> n equals a,t,g, or c

<400> 542

tcgaccacag cgtccgggag gcgcggacag cgttcggkgc tgtgtgccgg cgcctctggc 60
agggattggg gaatttttct gtaaacactt ctaagggcaa tacagccaaa aatgggtggc 120
tgcttctcag taccaatatg aagtgggtac agttttcaaa cctacacgtt gatgttccaa 180
aggatttgac caaacctgtg gtaacaatct ctgatgaacc agacatatta tataagcgcc 240
tctcggtttt ggtgaaaggc cagcataagg ctgtattgga cagttatgaa tattttgctg 300
tgcttgctgc taagaactt ggtatctcta ttaaaagtaca tgaacctcca aggaaaatag 360
agcgatttac tcttctccaa tcagtgcata ttacaagaa gcacagagtt cagtatgaaa 420
tgagaacact ttacagatgt tttagagttg aacatctaac tggaagcaca gcagatgtct 480
acttggataa tattcagcga aacttacctg aaggggttgc catggaagta acaaagacac 540

aattagaaca gttaccagaa cacatcaagg agccaatctg ggaaacacta tcagaagaaa 600
aagaagaaaag caagtcataa agcctcaggg aggccatttt tgcctaaatt tgaaatgagg 660
gtgggccaga tgagtatgtt taagtggaga gtgcttccag ctgagatgat ttgagtctgy 720
cctaactgct ccattgagtt ctctgcccct catcagctga gggcagggaa tggaaacttta 780
atggaagaaac cactttttatc tattcttttt attcattgtt tcagtctctga tttcagcaaa 840
catgagcaaaa ccactttgac tgaaagcaga aagagtgaaa attctatttt gttacgctac 900
tggtgttcaa ttattagttt gtaccatttt taatttatgt cagttgatgc atctgaaaat 960
aagtgcctgg agtgctcgta cccttatttt tttttaagat tcctagaagg aatccttggt 1020
taattcagat tgagcagtta aagtttttgc tatttacctt tgtgcaggct ggcatatgct 1080
aatttggggg tggttaaccaa ccgattttat ctcatgtaag cattacattt tgaagactga 1140
atatacttca cagcagatca aacacattta tggcatgcac tgacctcttc ttggagccca 1200
gaactttata gagttgccta ccagggttac tgtaatggaa tttatgatct taagaaatta 1260
ctagttgtat tatttatcct atgattcatn cattcaataa gcttttactg cataaacttt 1320
acattcagca ctgtagttaa gtacca 1347

<210> 543

<211> 1901

<212> DNA

<213> Homo sapiens

<400> 543

ggacaaaatta aggatgaaac tcttcaggct gcagttagag aaatthttggc cctaattggc 60
tatgtggatc cagtgaagg gagaggaatc cgaattctct caattgatgg tggaggaaca 120
aggggcgtgg ttgctctcca gaccctacga aaattagttg aacttactca gaagccagtt 180
catcagctct ttgattacat ttgtggtgta agcacagggt ccatattagc tttcatgttg 240
gggttgtttc atatgccctt ggatgaatgt gaggaacttt atcgaaaatt aggatcagat 300
gtattttcac aaaatgtcat tgttggaaaca gtaaaaatga gttggagcca tgcattttat 360
gacagtcaaaa catgggaaaa cattcttaag gataggatgg gatctgcact gatgattgaa 420
acagcaagaa accccacatg tctaaggta gctgctgtaa gtaccatagt aaatagaggg 480
ataacaccca aagcttttgt gttcagaaac tatggtcatt ttcctggaat caactctcat 540
tatttgaggag gctgtcagta taaaatgtgg caggccatta gagcctcatc tgcgtctcca 600
ggctactttg cagaatatgc attgggaaat gatcttcatc aagatggagg tttgcttctg 660
aataaccctt cggcattagc tatgcatgag tgtaaatgtc tttggccaga tgtgccgtta 720
gagtgcatag tatccctggg cactggacgt tatgagagt atgtgagaaa cacggtaaca 780
tacacaagct tgaaaactaa acttttcta gttatcaaca gtgctacaga tacagaagaa 840
gtccatataa tgcttgatgg cctgttacct cctgacacct atttttagatt caatcctgta 900
atgtgtgaaa acatacctct agatgaaagt cgaaatgaaa agctggatca gctgcagttg 960
gaagggttga aatacataga aagaaatgaa caaaaatga aaaaagttgc aaaaatatta 1020
agtcaagaaa aaacaactct gcagaaaatt aatgattgga taaaattaaa aactgatatg 1080
tatgaaggac ttccattctt ttcaaaattg tgatgagtat atgcttatgt tctcataaat 1140
gaagggtctgt ttagaagatc aaccacattc aataaggat tgtggggttc gacatgagtt 1200
aactttgaaa tacgtatgaa ttctggagaa tcctgaaaaa gacggtgctt caaccagctt 1260
gcatagcaca gagaatatc ttgggttacg aattcatatg ggaactaggc ttttaagatg 1320
ttaataatta gctaagcttt agtaaccctt actgtgctag tagattttag tagatattgg 1380
tgttatattg tttgatgttt gaaaatatat taatatatgt gccgaacaag aaaccgaaag 1440
ctatatgtga ctgtgtattt ttactttagt cctcataatc atgttgaaat tatgtgatca 1500
ttgatthttat ttcatatgga aaagctaatt tcttcttaaa tttacattac ctaatatctt 1560
cactagctat gttctccaat ccacactgcc ttttattgta atatcatcta aatagatgca 1620
gaaaaatgga attttctcta ttaaagtatt ttacatttga cataaaaaag aaccagatac 1680
agttttctat tcagatatgt ttattttaac attgtttggt taaaaaagg gaagttccag 1740
tcaaccactt tttaccctg aaatttcaag ataatgctat attactttt ccagatctaa 1800

cactagctta ttcttccctg ttataaaatg gtttgaactt actgaggaga tattcctatc 1860
attaacaaaa ataaactatt taaataawaa aaaagtcgac g 1901

<210> 544

<211> 842

<212> DNA

<213> Homo sapiens

<400> 544

ctgacagtac cggtcccggaa ttcccgggtc gacccacgcg tccgaacagt gttctaacta 60
ttaacgctac gatgcctgaa cctaccaagt ctgctcctgc cccaaagaag ggctccaaga 120
aggcgggtgac taaggctcag aagaaggacg ggaagaagcg caagcgcagc cgcaaggaga 180
gctattcagt gtatgtgtac aaggtgctga agcaggtcca tcccgcacacc ggcatctctt 240
ccaaggcaat ggggatcatg aattccttcg tcaacgacat cttcgagcgc atcgcaggcg 300
aggcttcccg cctggcgcat tacaacaagc gctcgacat cacctccagg gagatccaga 360
cgcccggtgcg cctgctgctt ccggggggagc tggccaagca cgccgtgtcg gagggcacca 420
aggccgtcac caagtacacc agttccaagt aactttgcc aaggagagac atgaagacag 480
aggagaaatg aatgcataaa ataactgata atatgaatct atacatagaa cttaggaagt 540
ctcatctgcc tgaatatgac tgtgtggatc ccacccaaat ccaactcatc ctggtttgct 600
gcacactggt tcatcaaaaag aaggttaccg aggggaagga actaaagggtg tttgcacttc 660
atgttacttt ttgagtttat aaacataaaa acagaattta cttctgttac agacctagtt 720
actgggaatt cattacttgc catggactac ctttgctaag aaaagtctga atgagaagat 780
ggcaggacgt ctgaaaaaaaa aagttataat taataaaatc tgcggagaat tgtaaaaaaa 840
aa 842

<210> 545

<211> 778

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (641)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (652)

<223> n equals a,t,g, or c

<400> 545

tgcacccacg cgctcgtact ttcccccta ccctgctcct cctcctccac agccgtcttt 60
ctctttgcct cagccacttc cttccttcgc ctcaccctcc ccagtgcact gaagaaggtta 120
accgggtcca gacccacgcg gcgccagttc tccggcgga aggaaaaccg cgcagagagg 180
cagcaatgaa tgtggatcac gaggttaacc tcttagtgga ggaaattcat cgtttgggtt 240
caaaaaatgc tgatggaaag ttaagcgtga aatttggggt cctcttccgt gatgataaat 300
gtgccaacct ctttgaagca ttggtaggaa ctcttaaagc tgcaaaacga aggaagattg 360
taacatatcc aggagagctg cttctgcaag gtgttcata tgatgttgac attatattac 420
tgcaagatta atgtggttta catatcttta tgtactgcc tttttgttt ctggtaaact 480
ggaatataaa gtgaaagaac aaacatttga acatacttaa tgtattttta tagaactttg 540
taaacgaaag gagattcatg ttttagaagt ctgtcctttt ttatatcttg aaagaaaatc 600

tatgtatgat gctataaaat aaatcctatt attttctmag natmtggttg anattctgcg 660
aaagcaacaw gcaaaactgaa gaccaactcc tatgagaaat attatgatgt ttatgtaata 720
aagacatgta actgtcttaa awwwaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa 778

<210> 546

<211> 2142

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (32)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (225)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (619)

<223> n equals a,t,g, or c

<400> 546

gaccttttgg agttagaaaa ggtccacgat tngtgcgata acttctgcca ccgatacatt 60
agctgtttga aggggaaaaat gcccatcgac mtcgtcattg atgaaagaga cggcagctcc 120
aagtcagatc atgaagaact ttcaggctcc tccacaaatc tcgctgacca taacccttct 180
tcttggcgag accacgatga tgcaacctca acccactcag caggncaccc cagggccctc 240
cagtgggggc catgcttccc agagcggaga caacagcagt gagcaagggg atggtttaga 300
caacagtgtg gcttcacctg gtacagtgcg cgatgatgat cgggataagg acaaaaaacg 360
ccagaagaaa agaggcattt tccccaaagt agcaacaaat atcatgagag catggctctt 420
ccagcatctc acacatccgt acccttccga agagcagaag aaacagttag cgcaagacac 480
aggacttaca atttctcaaag taaacaactg gtttattaat gccagaagaa gaatagtaca 540
gcccatgatt gaccagtcaa atcgagcagg ttttcttctt gatccttcag tgagccaagg 600
agcagcatat agtcagang gtcagcccat ggggagcttt gtgttgatg gtcascaaca 660
catggggatc cggcctgcag gtttgcagag catgccaggg gactacgttt ctccaggttg 720
tcctatggga atgagatkg cacagccaag ttacactcct ccccatgatga cccacaccc 780
tactcaatta agacatggac cccaatgca ttcatatttg ccaagccatc cccaccaccc 840
agccatgatg atgcacggag gacccctac ccaccctgga atgactatgt cagcacagag 900
ccccacaatg ttaaattctg tagatcccaa tggtggcgga caggttatgg acattcatgc 960
ccaatagtat aagggaactc aagggaagaag gaaacacacg caaaaactat ttaagactt 1020
tctgaacttt gaccagatgt tgacacttaa tatgaaattc cagacagctg tgattatttt 1080
ttacttttgt catttttcat caagcaacag aggaccaatg caacaagaac acaaatgtga 1140
aatcatgggc tgactgagac aattctgtcc atgtaaagat cctctggaaa aagactccga 1200
gagttataac tactgtagta taaatatagg aactaagtta aacttgtaga tttctgttga 1260
tcacgccgtt atgttgccctc aaatagtttt agaagagaaa aaaaaatata tccttggttt 1320
ccacactatg tgtgtgttc ccaaaagaat gactgttttg gttcatcagt gaattcacca 1380
tccaggagag actgtggtat atattttaaa cctgttgggc caatgagaaa agaaccacac 1440
tggagatcat gatgaacttt tggctgaacc tcactactcg aactccagct tcaagaatgt 1500
gttttcatgc ccggcctttg ttccctccata aatgtgtcct ttagtttcaa acagatcttt 1560

atagttcgtg cttcataagc caattcttat tattatTTTT gggggactct tcttcaaaga 1620
gcttgccaat gaagatttaa agacagagca ggagcttctt ccaggagttc tgagccttgg 1680
ttgtggacaa aacaatctta agttgggcag ctttcctcaa cacaaaaaaa gttattaatg 1740
gtcattgaac cataactagg actttatcag aaactcaaag cttgggggat aaaaaggagc 1800
aagagaatac tgtaacaaac ttcgtacaga gttcgggtcta ttaattgttt catgttagat 1860
attctatgtg ttacctcaa ttgaaaaaaa aaagaatgtt tttgctagta tcagatctgc 1920
tgtggaattg gtattgtatg tccatgaatt cttcttttct cagcacgtgt tcctcactag 1980
aagaaaatgc tgttaccttt aagctttgtc aaattttacat taaaatactt gtatgaggac 2040
tgtgacgtta tgttaaaaaa aaaagggtgtt aagtcacaaa aagcggtaat aaatatttca 2100
tttttgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaactc ga 2142

<210> 547

<211> 1893

<212> DNA

<213> Homo sapiens

<400> 547

cagtaccggt ccggaattcc cgggtcgacc cacgcgtccg ataatttata agcattgccca 60
ttgaaggctt aattgactga aattacttta acattttgga aattgttgta tatcactaaa 120
agcatgaatt ggaactgcaa tgaaagtcaa atttacttta aaaagaaatt aatatggctt 180
caccaagaag caaagttaa cttatttcat aattgcctac atttatcatg gtcctgaatg 240
tagcgtgtaa gcttgtgttt cttgggcagt ctttcttgaa attgaagagg tgaaatgggg 300
gtggggagtg ggaggaaagg tgacttcctc tgggtgttat tataaagctt aaattttata 360
tcattttaaa atgtcttggg cttctactgc cttgaaaaat gacaattgtg aacatgatag 420
ttaaactacc acttttttta accattatta tgcaaaattt agaagaaaag ttattggcat 480
ggttgttgca tatagttaaa ctgagagtaa ttcactctgtg aatctgcttt aattacctgg 540
tgagtaactt agaaaagtgg tgtaaaactg tacatggaat tttttgaata tgccttaatt 600
tagaaactga aaaatatcyg gttatatcat tctgggtgtg ttcttactga caccaggggt 660
ccgctgcccc atgtgtcctg gtgagaaaaa atatgcctgg cacagctttt gtatagaaaa 720
ttcttgagaa gtaactgtcc gctagaagtc tgtccaaatt taaaatgtgt gccatattct 780
ggttcttgaa aataagattc cagagctcct tgatcgcttt taataaactg caagttcatt 840
ttaaatgaag ggccagcata tatacttgca agataatttt cagctgcaag gattcagcac 900
cagttatgtt tgaatgaacc ctccctttct ctgagattct ggtccctgga aatccctttc 960
tgctagtggg gagcatgtaa gtgttaagtt tttaatctgg gagcagggca taggaagaaa 1020
atgtcagtag tgctaatagca ttttgcacta gaacgcttcg ggaaaatatt catgcttgcc 1080
atctgttcat ttctaaaatt atattcataa agttacagtt tgatacagga attattagga 1140
gtaattcttt tctgtttctg tttataatga agaacactgt agctacattt tcagaagtta 1200
acatcaagcc atcaaacctg ggtatagtgc agaaaacgtg gcacacactg accacacatt 1260
aggctgtgtc accattgtgt ggtgtacctg ctggaagaat tctagcatgc tacttgggga 1320
cataatttca gtgggaaata tgccactgac cgattttttt ttttctctct ttgcagtggg 1380
gctaggacag ttgattcaac aaagtatttt tttctttttt ctgagtccta atttgaacag 1440
gtcaaaagatg tgttcaggca ttccaggtaa cagggtgtgta tgtaaagtta aaaataggct 1500
tttttagaac tcactcttta gatatttaca tccagcttct catgttaaat atttgtcctt 1560
aaagggtttg agatgtacat ctttcatttc gtattttctca taggctatgc catgtgcgga 1620
attcaagtta ccaatgtaac actggccagc gggccagca atctccatgt gtacttatta 1680
cagtcttatt taaccagggg tcctaaccac taacattgtg actttgcttt gagacctttc 1740
ctctcctggg tactgaggtg ctatgaagcc aactgacaaa gatgcatcac gtgtcttagg 1800
ctgatgccac tacccgattt gtttatattgc aatttgagcc atttaaagac caataaactt 1860
ccttttttaa aaaaaaaaaa aaaaaaaaaa aaa 1893

<210> 548

<211> 630
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c

<400> 548
gcggttgtagc atttgggtcta gcgatgaaaa ctgagggaaa ggatgtaggg cctcctggct 60
naaccagcca gggggaaagg ggaggtttcc ggtgtcagct gtctctgggt gtctccataa 120
ccagttctta cttgcctgtg cagactttga ggggaagggt gtgaagactt cggttggtgtt 180
ccaccaactg gggacagcca tgcctatgtc ggtggaggaa gggcctgagt gccagggacc 240
tgtggttgac agcgtgccc tcgatgtggt catgaaggaa tggcatacca caccagacag 300
atgcgttcag ccgatgaagg gcaaaactgtc ttctacacct gtaccaactg caagttccag 360
gagaaggaag actcttgacc tttttcctgg gcaactctrc agtccctccc tcctttcggg 420
aggtgaagga tactgggttt ttagatgcct tgtccatcct gtctgggtgc aatgttttgc 480
tcccagaaga gaatcagatc atcatgtggg gattaccatt gttcctggag tactcctacc 540
cttagttgaa tttccttatt aaagttatat ttttctataa gaaaaaaaaa aaaaaaaaaa 600
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 630

<210> 549
<211> 586
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (508)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (510)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (514)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (573)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (583)
<223> n equals a,t,g, or c

<400> 549

```
ggcacgaagc cgcgtttgta ctgtgtctta ccatgcctga accggcaaaa tccgctccgg 60
cccctaaaaa gggctccaag aaagccgtca ccaaagccca gaagaaagac ggcaagaagc 120
gcaagcgcag ccgcaaagag agctactcca tctacgtgta caaggtgctg aagcaggtcc 180
accccgacac cggcatctcg tccaaggcca tgggcatcat gaactccttc gtcaacgaca 240
tcttcgagcg catcgsggga gaggttccc gcctggcgca ctacaacaag cgctccacca 300
tcacatcccg cgagatccag acggccgtgc gcctgctgct gcccggcgag ctggccaagc 360
acgccgtgtc cgagggcacc aaggcgggtc ccaagtacac cagctccaag tgagtccctg 420
ccgggacctg gcgctcgctc gctcgagtcg ccggctgctt gactycaaa gctcttttca 480
garccacca cctaactact agaaaarnan cttngttcac ttaatttccc ctttaatttc 540
tttttccata aaargttaag ttaattttta agnggtgaaa ggntca 586
```

<210> 550

<211> 1586

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1574)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1578)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1585)

<223> n equals a,t,g, or c

<400> 550

```
ccgctcagtc cgggagcgca gctggggcgc ggcgctccga cctccgcttt cccaccgccc 60
gcagctgaag cacatcccgc agcccggcgc ggactccgat cgccgcagtt gccctctggc 120
gccatgtcgc agaacggagc gcccgggatg caggaggaga gcctgcaggg ctctctgggt 180
gaactgcact tcagcaataa tgggaacggg ggcagcgttc cagcctcggg ttctatttat 240
aatggagaca tggaaaaaat actgctggac gcacagcatg agtctggacg gagtagctcc 300
aagagctctc actgtgacag cccacctcgc tcgcagacac cacaagatac caacagagct 360
tctgaaacag ataccatag cattggagag aaaaacagct cacagtctga ggaagatgat 420
attgaaagaa ggaaagaagt tgaaagcatc ttgaagaaaa actcagattg gatatgggat 480
tgggtcaagtc ggccggaaaa tattcccccc aaggagttcc tctttaaaca cccgaagcgc 540
acggccaccc tcagcatgag gaacacgagc gtcatgaaga aagggggcat attctctgca 600
gaatttctga aagtttctct tccatctctg ctgctctctc atttgctggc catcgattg 660
gggatctata ttggaaggcg tctgacaacc tccaccagca ccttttgatg aagaactgga 720
gtctgacttg gttcgtagt ggattacttc tgagcttgca acatagctca ctgaagagct 780
gttagatcct ggggtggcca cgtcacttgt gtttatttgt tctgtaaagt ctgcgttcc 840
aatttagtaa aataaaagaa tagacactaa aatcatgttg atctataatt acacctatgg 900
gatcaataag catgtcagac tgattaatgt ctactgtgaa aatttggtag taaattttca 960
tttgatatta gatataaata tctgaatata aataatttta atatactagt catgatgtgt 1020
```

```
gttgtat tttt aaaaattatc tgcaacctta attcagctga agtactttat atttcaaaag 1080
aatgaataac attgataata aaatcgctac ttttaaggggt ttgtccaaaa taaatattgt 1140
ggccttatat atcacactat tgtagaaagt attatttaat ttaaattggat gcaggttgtc 1200
tactaaagaa agattatata taactatgct aattgttcat aatcaacaga aaccaagata 1260
gagctacaaa ctcagctgta cagttcgtac actaaactct tcttgctttt gcattataag 1320
gaattaagtc tccgattatt aggtgatcac cctggatgat cagttttctg ctgaaggcac 1380
ctactcagta tcttttcctc tttatcactc tgcattggtg aatttaatcc tctcctttgt 1440
gttcaacttt tgtgtgcttt taaaatcagc tttattctaa gcaaatctgt gtctacttta 1500
aaaaactgga aatggaaaaa aaaataaatc tttgccaaat cctaaaaaaa aaaaaaaaaa 1560
ymgggggggg cccnggancc aattnc 1586
```

<210> 551

<211> 2143

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1602)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2086)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2097)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2140)

<223> n equals a,t,g, or c

<400> 551

```
cgtccgcgga cgcgtgggag gacgcgtggg cgagctgcag atgaagtttt agcagaagca 60
aagaaaccac gaattgagga tgaagagtgt gtgcgccttg ataaagagag attggctgcc 120
cgtttgaggg gtcacaaaga agggattgta cagactgaac agattaggtc tttgtctgaa 180
gctatgtcag tggaaaaaat tgctgcaatc aaagccaaaa ttatggctaa gaaaagatct 240
actatcaaga ctgatctaga tgatgacata actgccctta aacagaggag ttttgtggat 300
gctgaggtag atgtgacccg agatattgtc agcagagaga gagtatggag gacacgaaca 360
actatcttac aaagcacagg aaagaatttt tccaagaaca tttttgcaat tyttcaatct 420
gtaaaagcca gagaagaagg gcgtgcacct gaacagcgac ctgccccaaa tgcagcacct 480
gtggatccca ctttgcgcac caaacagcct atcccagctg cctataacag atacgatcag 540
gaaagattca aaggaaaaga agaaacggaa ggcttcaaaa ttgacactat ggggaacyta 600
ccatggatatg acactgraat ctgtaacgga ggggtgcatct gcccggaaga ctcagactcc 660
tgcagcccgag ccagtaccaa gaccagtttc tcaagcwaga cctcccccaa atcagaagaa 720
aggatctcga acaccatta tcataattcc tgcagctacc acctctttaa taaccatgct 780
taatgcaaaa gaccttctac aggacctgaa atttgtccca tcagatgaaa agaagaaaca 840
```

```

aggttgtcaa cgagaaaatg aaactctaata acaaagaaga aaagaccaga tgcaaccagg 900
gggcactgca attagtgtta cagtacctta tagagtagta gaccagcccc ttaaacttat 960
gcctcaagac tgggaccgag ttgtagccgt ttttgtgcag ggcctgcat ggcagttcaa 1020
aggttggcca tggcttttgc ctgatggatc accagttgat atatttgcta aaattaaagc 1080
cttccatctg aagtatgatg aagttcgtct ggatccaaat gttcagaaat gggatgtaac 1140
agtattagaa ctcagctatc acaaacgtca tttggataga ccagtgttct tacggttttg 1200
ggaaacattg gacaggtaca tggtaaagca taaatcgcac ttgagattct gaattatttg 1260
gctcctccat ttctggaaat tgagactcaa gctttatgaa tttatcaaga acttaaaaaat 1320
gaagaaggtc acagattgat cttttataag acctattttg atgctttgtg cttcaaggag 1380
atgatacctg tcatccatat aagcaaactt tttggcttac aactattttt ttaattattg 1440
ccttctagtc tgtaatggaa attgtatatt ttgatagaag ttttttctcc attggttaaa 1500
ttagcattac ttaaaatttg tttctttaga aaataaatgc aggttataaa tgtgtgtata 1560
tttagagatt ataaggctct ctgagccatc ttctgatttt tncattgctc tataattctt 1620
tttactgaaa atactatgtt atgaatggta ttaaatttta gtctctggaa catccaaaac 1680
caagcaaagg gatgtgacta ttttgaatga atcagaatgt caacttgat gtacactata 1740
tctacactta ctcattattt aaaaagaata atgaaaaatc tagatcaatt cttcaatttg 1800
attgaactgt tcagcctttt caagatttct ttatttaca atgattacat ttaaatgaat 1860
gtacattctt ctactgact ttggtgattt tgaaacctag aatgatgtgt ttctatctgt 1920
aatatctttc catttgaaaa aaatctcaaa acacagatta aaaccacaat aggctgtagt 1980
attttttatt ttgggagcca gagtatgatt tgggggaaga atatgtatca gccctattgc 2040
agtataactt taagctcctt ttctctttag tccacttttg attggnnaatt ttatggnata 2100
ggatttgaat ctccattta aggctggcag cctggagtcn tac 2143

```

<210> 552

<211> 1634

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1468)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1509)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1519)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1566)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1608)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1623)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1629)

<223> n equals a,t,g, or c

<400> 552

```
cggggctgag gctngggagc tggagcgggg aagaaaaggg aattccaacc tgtggaacct 60
tgggggggtcc cgggggtcgg cgccttccca ttgactgtgg gcggtgcaag ggacggagcc 120
tctggcggtc cgtgggggtg ttgggggtccg cagggggagg gaggggagtg tcagagtgtg 180
agcgggggtac gggaattcca aatttgaggg cctcccggct ctggcgccgg ggaggggagag 240
ctcaggccgc catgcgggac aggaccacg agctgagaca gggggatgac agctcggacg 300
aagaggacaa ggagcgggtc gcgctggttg tgcacccggg cacggcacgk ctggggagcc 360
cggacgagga gttcttccac aaggtccgga caattcggca gactattgtc aaactgggga 420
ataaagtcca ggagtggag aaacagcagg tcaccatcct ggccacgccc cttcccagag 480
agagcatgaa gcaggagctg cagaacctgc gcgatgagat caaacagctg gggagggaga 540
tccgcctgca gctgaaggcc atagagcccc agaaggagga agctgatgag aactataact 600
ccgtcaacac aagaatgaga aaaacccagc atggggtcct gtcccagcaa ttcgtggagc 660
tcatcaacaa gtgcaattca atgcagtccg aataccggga gaagaacgtg gagcggattc 720
ggaggcagct gaagatcacc aatgctggga tgggtgtctg tgaggagtgt gagcagatgc 780
tggacagtgg gcaaagcgag gtgtttgtgt ccaatatcct gaaggacacg caggtgactc 840
gacaggcctt aaatgagatc tcggccccgg acagtgagat ccagcagctt gaacgcagta 900
ttcgtgagct gcacgacata ttcaacttttc tggctaccga agtggagatg cagggggaga 960
tgatcaatcg gattgagaag aacatcctga gctcagcgga ctacgtggaa cgtgggcagg 1020
agcacgtcaa gacggccctg gagaaccaga agaaggcgag gaagaagaaa gtcttgattg 1080
ccatctgtgt gtccatcacc gtcgtcctcc tagcagtcac cattggcgtc acagtgggtg 1140
gataatgtcg cacattgttg gcactaggag caccaggaac ccagggcctg gccttctctc 1200
ccagcagcct ggggggcagg gcagagcctc cagtcggacc ccttcctcac actggcccc 1260
atgcagaagg gcagacagtt cttctggggt tggcagctgc tcatcatga tggcctctc 1320
cttcaggcct caatgcctgg gggagggcctg cactgtcctg attggccggg acacacgggt 1380
ttgtaaaaaa ttaaaaaaca aaaaaagagc atagaaagcc ctgtgcacgt gtgttcctg 1440
aagggtcggc ccaaggcttt cgggcatnca acctccttac cttctggacg tcccagggcc 1500
aggtctggnc cttggctgnt tcaggtcaaa ctggcagggg tgcttggtgc cacaagcaag 1560
gctgntctg gccttttttg gaaccccat taagggaatg ggttgggnca aggggaaggg 1620
gtnaacaanc cggg 1634
```

<210> 553

<211> 278

<212> DNA

<213> Homo sapiens

<400> 553

```
ggcacagaag gaactcacca aggcccatra gctggaggtr aggctgcaca ctttcagcat 60
gtttggratg ccccggtctgc cccctragga ccggcggcac tgggagatag gagaggggtg 120
cgacagtggc ctgaccatcg agaagtcctg gagggagctg gtgcctgggc acaaggagat 180
gagccaggag ctytgccacc aacaggaggc cctgtggrag ctcctgacca ccgagctgat 240
cttacgtgag aaagcttcaa gatcatgaac tgatcttg 278
```

<210> 554

<211> 2658

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1292)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2128)

<223> n equals a,t,g, or c

<400> 554

```
nggcacgagg agagtcacct ggactcagaa ctagagatat ccaatgaccc agacaaaatt 60
aaacttcagc tttctaagca taaggagttt cagaagactc ttggtggcaa gcagcctgtg 120
tatgatacca caattagaac tggcagagca ctgaaagaaa agactttgct tcccgaagat 180
astcagaaac ttgacaattt cctaggagaa gtcagagaca aatgggatac tgtttgtggc 240
aagtctgtgg agcggcgagca caagtggag gaagccctgc tcttttcggg tcagttcatg 300
gatgctttgc aggcattggt tgactggtta tacaagggtg agccacagct ggctgaggac 360
cagcccgctgc acgggggacc ttgacctcgt catgaacctc atggatgcac acaaggtttt 420
ccagaaggaa ctggggaaag cgaacaggaa ccgttcaggt cctgaagcgg tcaggccgag 480
agctgattga gaatagtcga gatgacacca cttgggtaaa aggacagctc caggaactga 540
gcactcgctg ggacactgtc tgtaaaactc ctgtttccaa acaaagccgg cttgagcagg 600
ccttaaaaca agcggaaagtg tttcgagaca cagtccacat gctgttgag tggtttctg 660
aagcagagca aacgcttcgc tttcggggag cacttcctga tgacacagag gccctgcagt 720
ctctcattga caccataaag gaattcatga agaaagtaga agaaaagcga gtggacgtta 780
actcagcagt agccatggga gaagtcattc tggctgtctg ccaccccgat tgcatcaca 840
ccatcaaaaca ctggatcacc atcatccgag ctgccttcga ggaggtcctg acatgggcta 900
agcagcacca gcagcgtctt gaaacggcct tgtcagaact ggtggctaata gctgagctcc 960
tggaagaact tctggcatgg atccagtggg ctgagaccac cctcattcag cgggatcagg 1020
agccaatccc gcagaacatt gaccgagtta aagcccttat cgctgagcat cagacattta 1080
tggaggagat gactcgcaaa cagcctgacg tggaccgggt caccaagaca taaaaagga 1140
aaaacataga gcctactcac gcgcctttca tagagaaatc ccgcagcggg ggcaggaaat 1200
ccctaagtca gccaaacctt cctcccatgc caatcctttc acagtctgaa gcaaaaaacc 1260
cacggatcaa ccagctttct gcccgctggc ancagggtgtg gctgttagca ctggagcggc 1320
```

```

aaaggaaact gaatgatgcc ttggatcggc tggaggagtt gaaagaattt gccaaactttg 1380
actttgatgc ctggaggaaa aagtatatgc gttggatgaa tcacaaaaag tctcgagtga 1440
tggatttctt cgggcgcatt gataaggacc aggatgggaa gataacacgt caggagttaa 1500
tcgatggcat tttagcatcc aagttcccca ccaccaagtt agagatgact gctgtggctg 1560
acattttcga ccgagatggg gatggttaca ttgattatta tgaatttggtg gctgctcttc 1620
atcccaacaa ggatgcgtat cgaccaacaa ccgatgcaga taaaatcgaa gatgagggtta 1680
caagacaagt ggctcagtgc aaatgtgcaa aaaggtttca ggtggagcag atcggagaga 1740
ataaataccg ggtaagggaag agaaaaagca gtcctttgtt gtggtgggtt ctcatatgtg 1800
gtgatcccca ccttttcctc ctgatgctta gaggcccaga gcccatcgga cttgagatgt 1860
ggtcactctc tgacctcatc tctatagatg ccaagtgtca ggtaccctgt tacatctgaa 1920
aactagtccc atatctacct agatagtagt agtttgtatt taagttttaa gataggagat 1980
atttcagagc tgtcacttca catctgacaa agttcctagg gggatgaagg tacctttgga 2040
aacaattata tctattgact gaccacttgc ccacaaagag atggtcattg tgagcctgag 2100
tggctcccag gctagagagg cctggggnaa actktgttga agccccaaca gacactgtgc 2160
ctgctctgag ctgggctaca aatggggccc aggagcactg aggagacatc aggctcagt 2220
gtcttccctg gaaagccatg ctagggtgtg ccataactga cagtgaacta tacttgtgtt 2280
ttagcttctt ttgggaccag ggtcagggac atagaaggat ctgaaacagg tctcctaaaa 2340
tatatcaaca gctcgtcaag attctctaaa gtcctaagaa aaatctatga ttggcaaaga 2400
ggatttagat tgcactaaga aacacaggaa ggtccatgtt tcattagtat atccaaaatg 2460
tcctcaaagt acaccaaata taccctatgc tgcagtcctc tgaggagtgc tgggtgaatc 2520
tgctttgaat ataacctagg gcatttagtt aataaagctc catataatct tatgcctgct 2580
tgttggattt tgttttcttg tttttgttt ttaattatct atgagagaaa tgaattaaca 2640
agaacaacat agcatgga 2658

```

<210> 555

<211> 1728

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1517)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1525)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1641)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1642)

<223> n equals a,t,g, or c

<400> 555

gaacgaacta catctcccg caggctgcgg aagggggctg agtagaagga ccgccgctcc 60

ggcctcccgc gacttctcga aggtgggcag gtcccacctt gtggaggatg gaggtgaccg 120
gggacgccgg ggtaccagaa tctggcgaga tccggactct aaagccgtgt ctgctgcgcc 180
gcaactacag ccgcgaacag cacggcgtgg ccgcctcctg cctcgaagac ctgaggagca 240
aggcctgtga cattctggcc attgataagt ccctgacacc agtcaccctg gtcctggcag 300
aggatggcac catagtggat gatgacgatt actttctgtg tctaccttcc aatactaagt 360
ttgtggcatt ggctagtaat gagaaatggg catacaacaa ttcagatgga ggtacagctt 420
ggatttccca agagtccctt gatgtagatg aaacagacag cggggcaggg ttgaagtgga 480
agaatgtggc caggcagctg aaagaagatc tgtccagcat catcctccta tcagaggagg 540
acctccagat gcttgttgac gctccctgct cagacctggc tcaggaacta cgtcagagtt 600
gtgccaccgt ccagcggtg cagcacacac tccaacaggt gcttgacca agagaggagg 660
tgcgtcagtc caagcagctc ctgcagctgt acctccaggc tttggagaaa gagggcagcc 720
tcttgtcaaa gcaggaagag tccaaagctg cctttggtga ggagggtggat gcagtagaca 780
cgggtatcag cagagagacc tcctcggacg ttgcgctggc gagccacatc cttactgcac 840
tgaggagaaa gcaggctcca gagctgagct tatctagtca ggatttggag ttggttacca 900
aggaagacc caaagcactg gctgttgctt tgaactggga cataaagaag acggagactg 960
ttcaggaggc ctgtgagcgg gagctcgccc tgcgcctgca gcagacgcag agcttgcat 1020
ctctccggag catctcagca agcaaggcct caccacctgg tgacctgcag aatcctaagc 1080
gagccagaca ggatcccaca tagcagcagc gggaaagtgtg ccaagggaagc tctgtggcgt 1140
tgtgttattg gtagacacc tcagcctcat catttgacta cctatgtact actctacccc 1200
ctgccttaga gcaccttcca gagaagctat tccaggcttc aacatacgcc gttccaccaa 1260
tttttttttt agccccacca gcttcaggac ttctgccaat tttgaatgat atagctgcac 1320
caacaatatc ccgcctcctc taattacata tgatgttctc tgttcaaaaag taattggcag 1380
tgattggcca ggcgcagtgg ctcacgcctg taatcccaga gtgctgggag tatagggtgg 1440
gagccaccac gcctggccta aatgaagtac cacatgaccg actgaccgac ctggggaaca 1500
tagcaagacc ccatctntac aaaantgtaa aaaataaaaa ttagccgggt gtggtggtac 1560
atgcctgtaa tcctagatac tcgggagggt aaggcagaag aattcacttg agcccaggag 1620
ttcgaggctg caatgagggt nngatcgtgc cattgcattc catcctgggt gggcagagtg 1680
aggcctgtct caaattaatt attccagtcc cccccaagga agggattg 1728

<210> 556

<211> 3355

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (210)

<223> n equals a,t,g, or c

<400> 556

catcagtgtt ccctgggggt ttctatgggt tatggagtgt agtgacaaaa agggctctga 60
gtgagagatg aactggttat atttgtggct tcttagagct ttttaacatg ctaatatcca 120
ttgtattttc taagaagttg tagtgttttc tccaaacttc cttgatctgg aacttttctt 180
gcagggcgctc ttgtggaaga agttttttcn agaacacagt ctgtagagtg ctgtagcaac 240
ttctgtcttc aacattcctg tctagctcat ttattctgtg tgcattctatt agtctttaa 300
gtcatgtagt gttttatagt cagtagaatg tagtgacttt ctattagttt ccatttgaat 360
tggttaacaaa tcctgacttt tctccaactc cagtaacctt cgagaaaagct ttgaatgccg 420
gcttcattcca ggccactgat tatgtggaga ttgggcaggc ataccttgat tacctgagga 480
gaaggggttga tttcaacaaa gactccagta aagagctgga ggagttgagg gccgccttta 540
ctcgtgcctt ggagtatctg aagcaggagg tggaagagcg tttcaatgag agtgggtgatc 600
caagctgcgt gattatgcag aactgggcta ggattgaggc tcgactgtgc aataacatgc 660

agaaagctcg ggaactctgg gatagcatca tgaccagagg aaatgccaaag tacgccaaca 720
tgtggctaga gtattacaac ctggaaaagag ctcattggtga caccagcac tgccggaagg 780
ctctgcaccg ggccgtccag tgcaccagtg actaccaga gcacgtctgc gaagtgttac 840
tcacatgga gaggacagaa gggtctttag aagattggga tatagctgtt cagaaaactg 900
aaaccgatt agctcgtgtc aatgagcaga gaatgaaggc tgcagagaag gaagcagccc 960
ttgtgcagca agaagaagaa aaggctgaac aacggaaaag agctcgggct gagaagaaag 1020
cgttaaaaaa gaagaaaaag atcagaggcc cagagaagcg cggagcagat gaggacgatg 1080
agaaagagtg gggcgatgat gaagaagagc agccttccaa acgcagaagg gtcgagaaca 1140
gcatccctgc agctggagaa acacaaaatg tagaagttagc agcaggggcc gctgggaaat 1200
gtgctgccgt agatgtggag ccccttcga agcagaagga gaaggcagcc tccctgaaga 1260
gggacatgcc caaggtgtg caccagagca gcaaggacag catcaccgtc tttgtcagca 1320
acctgccta cagcatgcag gagccggaca cgaagctcag gccactcttc gaggcctgtg 1380
gggaggtggg ccagatccga cccatcttca gcaaccgtgg ggatttccga ggttactgct 1440
acgtggagtt taaagaagag aaatcagccc ttcaggcact ggagatggac cggaagagtg 1500
tagaaggag gccaatgttt gtttccccct gtgtggataa gagcaaaaac cccgatttta 1560
aggtgttcag gtacagcact tccctagaga aacacaagct gttcatctca ggctgcctt 1620
tctctgtac taaagaggaa ctagaagaaa tctgtaaggc tcatggcacc gtgaaggacc 1680
tcaggctggt caccaaccgg gctggcaaac caaaggccct ggcctacgtg gagtatgaaa 1740
atgaatccca ggcgtcgcag gctgtgatga agatggacgg catgactatc aaagagaaca 1800
tcatcaaagt ggcaatcagc aaccctcctc agaggaaagt tccagagaag ccagagacca 1860
ggaaggcacc aggtggcccc atgcttttgc cgcagacata cggagcgagg ggaaggga 1920
ggacgcagct gtctctactg cctcgtgcc tgcagcgccc aagtgtctga gctcctcagg 1980
ctgagaacgg cctcgccg cgtcctgcag ttgccgccc agcagccacc gaggcacca 2040
agatgtccaa tgccgatttt gccaaagtgt tcttgagaaa gtgaacggga cgctgggaga 2100
caggaaatgc cttacttcac tctggcccgg cggacctccc accaccagc agtgcactgg 2160
ggatggacag gcctggtgtg ctgcgtgctc gcaaccacag atggctcctc ggctttagac 2220
agaaagggga aggggttcta agtcaagagc ctttcagtgc tccctcatat tgagggcagt 2280
ggcagaaaaa tgaccactct gcaggctggg cccaggatgt ggtgtcctga gatagttttg 2340
tatcttaaag actgaggcac agaagcgaaa cgagaacaca ctgtttttga gacacagttg 2400
tccaaatgtt tctggccagc tccggcccc ttttgtatga cacttctctt ccaccctgca 2460
cagcacatgt gcccgatg tcttttaatt taaaagatg aaatggcaga tgctagtaat 2520
tcacagaatg gcctcttggt ggggtgggtc tgagggaagt cagctataaa acatttgctg 2580
gagttttgtt caatggggct gtgcattttt atattatgtg tttgtaaatg acatgtcagc 2640
ccttgtttca tgtttcctaa aagcagaata tttgcaacat ttgttttgta taggaattat 2700
ttgtgccacc tgctgtggac tgttttcttt gcctagttag tagtgacctg tgttgtctaa 2760
acatgagttt cagccctttg gttttgttta ataccatgtc aaatgcaaac ttcaattctc 2820
cccatttagc tttattaaac tgacgttctc ttcaaaactt cttgctgaat ggtactcaga 2880
tgtgcattca catacagatg tgttttgaag tgggtgtacc ttgctttacc taatagatgt 2940
gtaaatagaa cttttgtaag tcaaatccca ttgtcacttt gatttaaat attccagctg 3000
tgatgtgtct tcattttata gcagtttgac actggagctt ttgagctttt ttacctcaca 3060
tcttttatca aataatattt actgctttga aaacagcaac agcattggcc agttcagtag 3120
gggaagcttg ctttattaag acactctgga gaaagacgtc agggaatcct tgatatgtc 3180
gtgggaatca actcctcatt tatctgttgc gtaagtttaa gttttgtgc atcagtcggg 3240
tttcttatat ttttttaact taacattttt taatataacc gattaaaaa tagacagaac 3300
agtaaaaata actcctgtgt gcctaccaa aaaaaaaaa aaaaaaa 3355

<210> 557

<211> 1079

<212> DNA

<213> Homo sapiens

<220>
<221> misc feature
<222> (187)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (641)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1042)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1055)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1064)
<223> n equals a,t,g, or c

<400> 557
gccgtggtcg gcggtctgctg ggctccgcgc cgggggtccga gtcccacgaa gccccggccc 60
gagccgcccg atgcccgcgc gcagcggsgc ccagttttgc cgacggatgg ggcaaaagaa 120
gcagcgacca gctagagcag ggcagccaca cagctcgtcc gacgcagccc aggcacctgc 180
agagcancca cacagctcgt ccgatgcagc ccaggcacct tgccccaggg agcgctgctt 240
gggaccgccc accactccgg gcccataccg cagcatctat ttctcaagcc caaagggccca 300
ccttaccgca ctgggggttg agttcttcga ccagccggca gtccccctgg cccgggcatt 360
tctgggacag gtcctagtcc ggcgacttcc taatggcaca gaactccgag gccgcacgt 420
ggagaccgag gcatacctgg ggccagagga tgaagccgcc cactcaaggg gtggccggca 480
gacccccgc aaccgaggca tgttcatgaa gccggggacc ctgtacgtgt acatcattta 540
cggcatgtac ttctgcatga acatctccag ccagggggac ggggcttgcg tcttgctgcg 600
agcactggag cccctggaag gtctggagac catgcgtcag nttcgagca ccctccgaa 660
aggcaccgcc agcctgtgcc tcaaggaccg cgagctctgc agtggccccct ccaagctgtg 720
ccaggccctg gccatcaaca agagctttga ccagagggac ctggcacagg atgaagctgt 780
atggctggag cgtggtcccc tggagcccag tgagccggct gtagtggcag cagcccgggt 840
gggcgtcggc catgcagggg agtggggccg gaaaccctc cgcttctatg tccggggcag 900
cccctgggtc agtgtggtcg acagagtggc tgagcaggac acacaggcct gagcaaaggg 960
cctgccaga caagattttt taattgttta aaaaccgaat' aaatgtttta tttctagaaa 1020
aaaaaaaaa aaaaaaactc gngggggggc ccggnaccca attngcccta aagtatgg 1079

<210> 558
<211> 724
<212> DNA
<213> Homo sapiens

<400> 558

ctctaggcct gyygtgtycaa gacagcctgg tcaacatagt gagacactgt ctctaccaa 60
aaaaggaagg aaggacaca tatcaaactg aaacaaaatt agaaatgtaa ttatgttcta 120
agtgcctcca agttcaaac ttattggaat gttgagagtg tggttacgaa atacgttagg 180
aggacaaaag gaatgtgtaa gtctttaatg ccgatatcct cagaaaacct aagcaaacct 240
acaggtcctg ctgaaactgc ccactctgca agaagaaatc atgatatagc tttgccatgt 300
ggcagatcta catgtctaga gaacactgtg ctctattacc attatggata aagatgagat 360
ggtttctaga gatggtttct actggctgcc agaactctaga gcaaagccat ccccgctcct 420
ggttggtcac agaatgactg acaaagacat cgattgatat gcttctttgt gttatttccc 480
tcccaagtaa atgtttgtcc ttgggtccat tttctatgct tgaactgtc ttctagcagt 540
gagccaaatg taaaaagtg aataaagtca ttattaggaa gttcaaaagc attgctttta 600
taatgaactt agaaaaacgt atgtgtgtgt gttaatttag aataaaattc ctctaggcag 660
attcaggaaa aaaaaaaaaa aaaagtcgag cgcccgcaat ttagtagtag taggtcgcg 720
ccgc 724

<210> 559

<211> 3125

<212> DNA

<213> Homo sapiens

<400> 559

ggaggagctt ctaaagaggt gactgggtatt ttgtagcatt ccttgctcaag ttctcctttg 60
cagaatacct gtctccacat tcctagagag gagccaagtt ctagtagttt cagttctagg 120
ctttccttca agaacagtca gatcacaag tgtctttgga aattaaggga tattaaatty 180
taagtgattt ttggatggtt attgatatct ttgtagtagc tttttttaaa agactaccaa 240
aatgtatggt tgcctttttt ttgtttttt ttttttttaa ttattkctct takcagatca 300
gcaatccctc tagggacct aatactaggt cagctttggc gacactgtgt cttctcacat 360
aaccacctgt agcaagatgg atcataaatg agaagtgttt gcctattgat ttaaagctta 420
ttggaatcat gtctctgtgc tcttcgtctt ttctttgctt ttcttctaac ttttccctct 480
agcctctcct cgccacaatt tgctgcttac tgctgggtgt aatatttggt tgggatgaat 540
tcttatcagg acaaccactt ctcgaactgt aataatgaag ataataatat ctttattcct 600
tatccccctt caaagaaatt acctttgtgt caaatgccgc ttgttgtagc ccttaaaata 660
ccacctcctc atgtgtaaat tgacacaatc actaatctgg taatttaaac aattgagata 720
gcaaaagtgt ttaacagact aggataatth ttttttcata tttgccaaaa tttttgtaaa 780
ccctgtcttg tcaataaagt gtataatatt gtattattaa tttattttta ctttctatac 840
catttcaaaa cacattacac taagggggaa ccaagactag tttcttcagg gcagtggacg 900
tagtagtttg taaaaacgtt ttctatgacg cataagctag catgcctatg atttatttcc 960
ttcatgaatt tgctactgga tcagcagctg tggaaataaa gcttgtagc cctctgctgg 1020
ccacagttag gaaagtagca caaataggat acagttgtat gtagtcattg gcaacaattg 1080
catacaatth tactaccaag agaaggtata gtatggaaag tccaaatgac ttcttgatt 1140
ggatgttaac agctgactgg tgtgagactt gaggtttcat ctagtccttc aaaactatat 1200
ggttgccatg attctctctg gaaactgact ttgtcaaata aatagcagat tgtagtgtct 1260
ggtttggttt ggacagtagt gctttctatc atattgttgt gtgcaatggt aatttgttct 1320
actggccaaa gcctctttca gcagtgcctt gccatcatgc ttaaaagtth ggctagtata 1380
tcttgctgga tggagccttg aactccggca aggattgaac catctgactt ccaaatttgc 1440
cttccccctt ggacctcact attacaagc aaacctttca gggccctctt agctctcaga 1500
agctatgtat gggctttccc agattttaaa gctgctgcct cgagaactac tcatttctct 1560
cctggtcagc agacagaaat agccatacta atctcatagg gctcaaatgc atcttcaggc 1620
agcaggggaa caagcagcgt ggcacaggcc ttcttgactg gaggaagagc ttgctggcat 1680
ggtgggcagt attccaggag aggccatgtc cgtgttctact tcttggcaca tttcagttcc 1740
gttttctctt tgttttaaac tgccctttta gatgtggatg ccttaatgct gtaacacatt 1800
tgaaaacatt ggcaatactt aagttgctgc catgattaca gatggaatta ttggctacca 1860

```

aagagacgca attgatgatg agaagcatga ttcttgcttc catataacca aagttaatct 1920
taattgcaat ttgactccgt ttccttggtg gggatagact ttcttcagat tccaagtgtc 1980
ctcttaaatg gcaaattaag ttaaagaata ctactgtccc attccctca cttattctcc 2040
agttaattgc ttgtcagttc catttcaaga aagcagtgat gttccagggt tgattcagtt 2100
ttcctgtgca cactattgcc aaattttttt ttgcaaaaga ttctgcactg gaacgtagac 2160
agttggaaac agtactacct acctagaggt tatgtgtttt ctctttctcc ccgctttcac 2220
ctctttcttt cccaattcaa aacagccaag tgagccctgt tctgggtattt tgaatcatta 2280
gagaaaaaaa agggagtggc tgttttgagt tgtcctttct ttgcagaaag gagaaaatgt 2340
gattgtgttt tttttttacc agcctacttc taagtgtcac tgccctgggtt ttctcttttt 2400
caaggattag aactaagagg acacaccagc atcggagtgt attaagcccc tgaaacacat 2460
ggtagctagg gactgaacac aggaaccgta tgacagcagc acaaaccccc aaaggatgtt 2520
cctgccttgt gggcccttga gcccttggtg agactgagaa tcatgaccag attcatccag 2580
aactgctgca gtgttaagtg aaaatcctct gtagttgttc tgcagaggaa ccttccttcc 2640
attagaaaat ttctgtctca tacagaatgg tccacatcac ccaaagtga ctgttgagga 2700
tgctgtgaaa ttaaaacctc tttgtacctg agacatctag attcacctca ggaggcctga 2760
aggaaaatgt taacttgtgg gaaagaacta gacaaccatt taggaattct ctagatatac 2820
tcagcctaac ccagtggctt aacacaagga gattggcttt gatctttttt tcttgtggca 2880
tcttccagca agttagaagt ctcattgggt aagactgcag ttccctctgt tcaatagctg 2940
gaacagtgat tttaaatgtc cctttttctg gatcccttgt aaacatgaaa tcattccatg 3000
gatggctgcc ttataatttt gtctctttcc actttaattg tgaatgggta aaaaaatgct 3060
gttttctgat attaaatttt tattagtga taccttaaaa aaaaaaaaaa aaaaaaaac 3120
tcgag                                     3125

```

<210> 560

<211> 2645

<212> DNA

<213> Homo sapiens

<400> 560

```

aagaggagct gggcaggagg cagggcaagg agaaagctgt tcgggggtct tgtctggatt 60
ttggttgccct cctccaatgt tctctacct ctactacaag gatgggtcat gtttgtgtcc 120
gtgacagcgt tttctttttc gtcctctctt ctgggcatgt tctctctctg catggtggct 180
caaattgatg ctaactggaa cttcctggat ttgtccatcc attttacagt atttgtcttc 240
tattttggag cttttttatt ggaagcagca gccacatccc tgcattgattt gcattgcaat 300
acaaccataa ccgggcagcc actcctgagt gataaccagt ataacataaa cgtagcagcc 360
tcaatttttg cctttatgac gacagcttgt tatggttgca gtttgggtct ggctttacga 420
agatggcgac cgtaacactc cttagaaact ggcagtcgta tggttagttt acttgtctac 480
tttatatgtc tgatcaatth ggataccatt ttgtccagat gcaaaaacat tccaaaagta 540
atgtgttttag tagagagaga ctctaagctc aagttctggt ttatttcatg gatggaatgt 600
taatttttatt atgatattaa agaaatggcc ttttatttta catctctccc ctttttccct 660
ttcccccttt attttcctcc ttttctttct gaaagtctcc ttttatgtcc ataaaataca 720
aatatattgt tcataaaaaa ttagtatccc ttttgtttgg ttgctgagtc acctgaacct 780
taatttttaatt tggtaattac agcccctaaa aaaaacacat ttcaaataag cttccacta 840
aactctatat tttagtgtaa accaggaatt ggcacacttt ttttagaatt ggccagatgg 900
taaataattta tgcttcacgg tccatacagt cctgtgcaca actattcagt tctgctagta 960
tagcgtgaaa gcagctatac acaatacaga aatgaatgag tgtggttatg ttctaataaa 1020
acttatttat aaaaacaagg gagggctggg tttagcctgt gggccatagt ttgtcaacca 1080
ctggtgtaaa accttagtta tatatgatct gcattttctt gaactgatca ttgaaaacct 1140
ataaacctaa cagaaaaagg acataatatt tagtgtcatt atgcaataat cacattgcct 1200
ttgtgttaatt agtcaaatat ttaccttttg agaatactta ctttggagg aatgtataaa 1260
atctctcagg cagagtcctg gatataggaa aaagtaattt atgaagtaaa cttcagttgc 1320

```

```
ttaatcaaac taatgatagt ctaacaactg agcaagatcc tcactctgaga gtgcttaaaa 1380
tgggatcccc agagaccatt aaccaatact ggaactggta tctagctact gatgtcttac 1440
tttgagttta tttatgcttc agaatacagt tgtttgccct gtgcatgaat ataccataat 1500
ttgtgtgtgg atatgtgaag cttttccaaa tagagctctc agaagaatta agtttttact 1560
tctaattatt ttgcattact ttgagttaaa tttgaataga gtattaaata taaagttgta 1620
gattcctatg tgtttttgta ttagcccaga catctgtaat gtttttgac tggtgacaga 1680
caaaatctgt tttaaaatca tatccagcac aaaaactatt tctggctgaa tagcacagaa 1740
aagtatttta acctacctgt agagatcctc gtcattgaaa ggtgccaaac tgttttgaat 1800
ggaaggacaa gtaagagtga ggccacagtt cccaccacac gagggctttt gtattgttct 1860
actttttcag ccctttactt tctggctgaa gcatccctt ggagtccat gtataagttg 1920
ggctattaga gttcatggaa catagaacaa ccatgaatga gtggcatgat ccgtgcttaa 1980
tgatcaagtg ttacttatct aataatcctc tagaaagaac cctgttagat cttgggtttg 2040
gataaaaata taaagacaga agacatgagg aaaaacaaaa ggtttgagga aatcaggcat 2100
atgactttat acttaacatc agatcttttc tataatatcc tactactttg gttttcctag 2160
ctccatacca cacacctaaa cctgtattat gaattacata ttacaaagtc ataaatgtgc 2220
catatggata tacagtacat tctagttgga atcgtttact ctgctagaat ttaggtgtga 2280
gattttttgt ttcccaggta tagcaggctt atgtttggtg gcattaaatt ggtttcttta 2340
aaatgctttg gtggcacttt tgtaaacaga ttgcttctag attgttaca accaagccta 2400
agacacatct gtgaatactt agatttgtag cttaatcaca ttctagactt gtgagttgaa 2460
tgacaaagca gttgaacaaa aattatggca tttagaatt taacatgtct tagctgtaaa 2520
aatgagaaag tgttggttg ttttaaaatc tggttaactc atgatgaaaa gaaatttatt 2580
ttatacgtgt tatgtctcta ataaagtatt catttgataa aaaaaaaaaa aaaaaaaac 2640
tcgag 2645
```

<210> 561

<211> 1717

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (386)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (427)

<223> n equals a,t,g, or c

<400> 561

```
gctgaaatga ctatacgagg taaagaagta gtaccagatg gtcccaaagt tcccttttag 60
cctgaaagct tttctttgtc cctccttagt gaatctgtgt tccgagccct actctaaagt 120
tcagtgggtca atacaatagt ccaccaagag actgggaatr attagaagtg aaattgggtcc 180
ctccttacca aggaggggca gatgatctcc attgcacagg gcgattagat tctggagctg 240
aggtggggac tgcaggaggc cacctagtct ggtaggtttc aaccaagct gtgtacatta 300
gaattccctt gggagcgtgc aggaaatata gatgccatg ccacattcca gaccaactga 360
agctgaatct ccagagttagg gcctgnatgg catataagct tcacaggtga tctgcagtac 420
agtgaanatg gaagatgca tgtgtacctt tttgcaataa agatgaagag gacagcaagc 480
tccagacagg agctgggact yaaccagat ctcttaagtc ctgcctgggt gctccttaaa 540
agtccagaag tgttgcccca agccctccct caacatctct gggaaccgca gctgcagcac 600
gatggggggt cagtggccct gtttgccctt taccagctg tggtttatct tgcttgtatg 660
```

tctgcacagg cgggatgctc gtgttccttg tcttattctc catttactca gtcactgggg 720
ctcactcccc tctgatgcac tagccaagat tgccttagtg tgctccagaa aagaaggcca 780
aatcccaggc attgtcaggg cagcagagct ctacaggata ggcttacctt tcccacctgt 840
gtggctagca cttcacagtt tacaaattcc tcccacctcc actcagtgc acatgctgtt 900
ctaacacagg tcaggcaggc attacagtcc ccattgttcag aatcaaaagac cttagcctcag 960
agaagtgaag aaacatcatg ccaagggtcat tgactgcca gcggtagagg tggggttgca 1020
tccagagagc tccccggtat gcctctgcac aatgccattc cttggccagc tccctccacc 1080
ccaagggacc cagactgcac acttaacaaa caggacacag gtgtctttga acaaactttt 1140
ttgtattatt atttttacat ctagaataaa ttattttaa tttttcacag caagggagag 1200
ggataggtaa tttttatcag atattttttt aaaccatctg tttttttaa tacatttttg 1260
tttatgttct tgagctgatg tagtggaaact tgcctagcac attcaggtcc cagccagttg 1320
gcagagcatg ctctcatctc cttattccat accctgggag tcccctttct gttgactcag 1380
gaactttctg agaatgagga cagcactagg agatgagctt tggcaggtat ccaccttaac 1440
gctacaataa ttgtgcttcc tgaaacaaaa cttgagattg tatcatagaa ggaaacagga 1500
agtcagaaat caaatctatg cttttaattg aaaccgtgcc tgaaacagtt tgaatgattg 1560
ttttaatgtt gtttctgaaa ttcctgtgac ctttgtgaaa aataatgata ataaataaaa 1620
gtgaaaaata atagatgtgg aatatgcaat ggaaataatg taacaaaata ataaacatct 1680
ggccatttta ctacaaaaaa aaaaaaaaaa aaaaaaa 1717

<210> 562

<211> 2417

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2362)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2386)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2398)

<223> n equals a,t,g, or c

<400> 562

caaagccggg aagaggaaaa gctcggacct accctgtggt cccggggttc tgcagagtct 60
acttcagaag cggaggcact gggagtccgg tttgggattg ccaggctgtg gttgtgagtc 120
tgagcttgtg agcggtgtg gcgccccaac tcttcgccag catatcatcc cggcaggcga 180
taaactacat tcagttgagt ctgcaagact gggaggaact ggggtgataa gaaatctatt 240
cactgtcaag gtttattgaa gtcaaaatgt ccaaaaaaat cagtggcggg tctgtggtag 300
agatgcaagg agatgaaatg acacgaatca tttgggaatt gattaaagag aaactcattt 360
ttccctacgt ggaattggat ctacatagct atgatttagg catagagaat cgtgatgccca 420
ccaacgacca agtcaccaag gatgctgcag aagctataaa gaagcataat gttggcgtca 480
aatgtgccac tatcactcct gatgagaaga gggttgagga gttcaagttg aaacaaatgt 540
ggaaatcacc aaatggcacc atacgaaata ttctgggttg caggtcttc agagaagcca 600
ttatctgcaa aaatatcccc cggcttgtga gtggatgggt aaaacctatc atcataggtc 660

```

gtcatgctta tggggatcaa tacagagcaa ctgattttgt tgttcctggg cctggaaaag 720
tagagataac ctacacacca agtgacggaa cccaaaaggt gacatacctg gtacataact 780
ttgaagaagg tgggtggtgtt gccatgggga tgtataatca agataagtca attgaagatt 840
ttgcacacag ttccttccaa atggctctgt ctaagggttg gcctttgtat ctgagcacca 900
aaaacactat tctgaagaaa tatgatgggc gttttaaaga catctttcag gagatatatg 960
acaagcagta caagcccag tttgaagctc aaaagatctg gtatgagcat aggctcatcg 1020
acgacatggt ggcccaagct atgaaatcag agggaggctt catctgggccc tgtaaaaact 1080
atgatggtga cgtgcagtcg gactctgtgg cccaagggtg tggctctctc ggcatgatga 1140
ccagcgtgct ggtttgtcca gatggcaaga cagtagaagc agaggctgcc cacgggactg 1200
taaccggtca ctaccgcatg taccagaaag gacaggagac gtccaccaat cccattgctt 1260
ccatttttgc ctggaccaga gggttagccc acagagcaaa gcttgataac aataaagagc 1320
ttgccttctt tgcaaatgct ttggaagaag tctctattga gacaattgag gctggcttca 1380
tgaccaagga cttggtgctt tgcattaaag gtttacccaa tgtgcaacgt tctgactact 1440
tgaatacatt tgagttcatg gataaacttg gaaaaaactt gaagatcaaa ctagctcagg 1500
ccaaacttta agttcatacc tgagctaaga aggataattg tcttttggtg actaggtcta 1560
caggtttaca tttttctgtg ttactactca ggataaaggc aaaatcaatt ttgtaatttg 1620
tttgaagccc agagtttatc ttttctataa gtttacagcc tttttcttat atatacagtt 1680
attgccacct ttgtgaacat ggcaagggac ttttttacia tttttatatt attttctagt 1740
accagcctag gaattcgggtt agtactcatt tgtattcact gtcacttttt ctcatgttct 1800
aattataaat gaccaaaatc aagattgctc aaaagggtaa atgatagcca cagtattgct 1860
ccctaaaata tgcataaagt agaaattcac tgccttcccc tcctgtccat gaccttgggc 1920
acagggaagt tctggtgtca tagatatccc gttttgtgag gtagagctgt gcattaaact 1980
tgcacatgac tggaaacgaag tatgagtga actcaaagt gttgaagata ctgcagtcac 2040
ttttgtaaag acctgtctga atgtttccaa tagactaaat actgtttagg ccgcaggaga 2100
gtttggaatc cggaataaat actacctgga ggtttgtcct ctccattttt ctctttctcc 2160
tcctggcctg gcctgaatat tatactactc taaatagcat atttcatcca agtgcaataa 2220
tgtaagctga atcttttttg gacttctgct ggccgtgttt atttctttta tataaatgtg 2280
atttctcaga aattgatatt aaacactatc ttatcttctc ctgaactgtt gattttaatt 2340
aaaattaagt gctaattacc anaaaaaaaa aaaaagsgsg ccggtntaag gatccctnga 2400
ggggccaagt tacgcggg                                     2417

```

<210> 563

<211> 1544

<212> DNA

<213> Homo sapiens

<400> 563

```

caaggattca gaattttgca gtcacagaag agtgtattta ttatgtagaa tgaatgaggg 60
tactgtcacc tgccttaatg taggtaggcc cagagtctta catttaagat cttacatgca 120
gttataaaac cgccacagtc ttcaatccag atttgaagac tcatgccata ggtgacattc 180
taaaatacca ttaaagccac ttaaagtgtt aataagaata tacatgcaca tcagctcaat 240
gtctttgagt attaatTTTA tgtaagcatt ctattttaaca tgaatatagg acaaatcatg 300
gctatatcta tagaccttgg ataaactgga ttgaccaatt atacactcac ggtgactttt 360
ttattggtgg gaaggggatt ggggtggggc aggctggctt aatgtaatat gagcaaccaa 420
agtgggactt ctgtctcccc gctatatctc cattgtctctg aatgggtgat tgaagggtca 480
gggaactaga tttttatggc ttagttcact gtgattgtac atttatactt ggccatgtg 540
ctggccgcac ctgaacatag ctggtgctta tgccgagtta tttgygatga gtaaatattt 600
agtttctttt tcttcatatt tataatgttg atctggcatc ctgaggctgc agctttatta 660
gcttataamt tactcatctc trtctttacc acgaggctct gtattgttga tatttgcaac 720
ttgttttgct tttccattgg tggaaattgaa ataattagtt ttttaattaca taagatgcct 780
gtttgctatt tgggtggaaga tagatgttca tattgaagca gtcacatttg tactgtagtt 840

```

caataaaaga aaaatgaagt attctgtagc ctatatTTTT catagagctc atgagcattt 900
actgtacttg ctgggtcttg ccaagatcat ttattccgct gcattgccaa agtgtcttca 960
taccaaatta aaggTggtt taatataTgt ttcatggaag ttgtttataa aattcaaagg 1020
tatttcattt aggtgaaaag tcttatttat taaagtgggt tgaataaagt agatcaaaac 1080
ttccagagat cttaatggct atataggaaag aaataTcact caccataatt taaataaaga 1140
ataaaaatac wtgtattttr tggTggcaaa tgTttggtag aactgtaatt agaaaaatac 1200
aagtatatTT gcgtgatggT tacactagaa gccagactt tacgactaca caatatattc 1260
atgtatctaa actgtacttg taccCctaa atttattttt aaaaaaggaa aaataaaagt 1320
atcatgaaaa aacTattttt tttttccact gtccttccac tactcccata acaaacttat 1380
ccatggTtg taaaatttta catatttcta tccttgaaat gaaggcttct tttaaattcc 1440
aaagaagtca tggaggcctg tgcatttgaa ttgtatatgc tagtgaggaa aagatttaga 1500
cattycaggc aggktggmma rgcgcggTg cycacacctg taac 1544

<210> 564

<211> 2299

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (179)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (180)

<223> n equals a,t,g, or c

<400> 564

tcagacagtt tgaatacttg aatcatgcag gccaatatta taatgtgaaa aggtatctac 60
tctatttaca ctcccaaata ggcCcataca tgctaaaccg tagagaatga gctcgcttgt 120
gtctattcat catgttttagc ctttggtatc tttttttttt ttccttctat tcctcccn 180
ccccccccc cgccctttt ttttytytt gcaaaacat tttttgggt gataacgtat 240
gagcttttcc ctttgactg aatgatgttc tctccgtctc atcggcagta tggggggcag 300
ctgtcccagt gtcaatgttt actcaagggt gttcttagga ggcgtgcgt ctctactatg 360
ccttgatgtt gcctacctta ttgtggtatc gtggagtta aaagatcaag ttaggatgct 420
gacttaggat tattaatgaa agtgttgca cagttttttc atgttgtaaa actaaagaat 480
ttcgtctgc agtttgaaaa actgtggcca cagctgtgac ttgcagccca cctgccaccc 540
aggacgggcc ctgcacttg aataggcttt ccattttgtt ttggagggtc tcactttgaa 600
ccttctgtt tacagatttt tttgtttgtt ttttgagaaa aaaaaatgtt tactcttcca 660
tcatttaaaa aaaatgtaaa agacaaaaaa aaaatggagg atgatttaaa agatgctttc 720
tatctctggg aaaaaggagc agcatttggc catgttctt tgtttttcta ttcctgtccc 780
aaatcaaaga gcatggttct caggaaaacc agttccccag tttaaaaaaa aaaaaaaaaa 840
ttccttgtag tttcttagag gaaaaaaga aaaaccccaa cttttagcac tgatactaca 900
tattgtctg ttaaagaatt ttctctgcca aaaaaaaga aaaaacaaaa aaacgcttaa 960
agctggagtt tgacattctg ctttcagatg ctgtcttttt attagttagt gatgatgggt 1020
tgctaataat caataggtaa taattttttg taatccatc aagtggctcc atatgtttct 1080
gctctctcgt gactgtgtta atgtttaact gtgtacctt aaagccgaaa tcagtaacta 1140
tgcatactgt aaccaaggta ttgggcttac agagtgttt gtgtataaa gaaaatttta 1200
aatgttgtt caaactaacg agttacacca ttttaaaact tctttcctcc cccctttttt 1260
tgccacaaa tggattata atgcttgctt agtcaaagaa gagagactaa acaagggtaa 1320

```
aaattttaac agtacagaat ttgccatcat atcattgcct tgattctaac tgtttgtgtc 1380
ctaagatgca aaagaagtca gtggctttta actgtttaca aatagaatgt gattgtaaaa 1440
tgtacagttt gggtgtgttt gaattatgaa atttcttcag atataataaa ccatgacttt 1500
ttggctgctc aacattaatt gtctcctttt tgtgaattta tttgtaggct cttttttata 1560
atgaaagtgt caaagtgtgt atgtatgagg gttctcatag agcaaccgat taaaaatcta 1620
agcaaatatt tgaacatttt atctgaactc atcacaaatt caccctgaaa taatgtgaga 1680
acaatgggaa actgtagctt gctccttccc accctctctg agcatctttg ggatcttgtt 1740
gctcaaaaact cttctgtgac ttcatcttcc ccaccatttg tgcccatctc aagcctcagc 1800
aagaaaccat gtggaacatg aagcttaatg acttgacagt gtactagtgt taaactctca 1860
tacctctgtt acaaagcgag aaacgccaca cccggactgg ccttttcttc ccccttcacg 1920
gccctcgctt ctccctgcag gagctcgggg gcgaaacctg tgtatggatt tcagtgtatg 1980
acttcagatc atgctccaac ttgccagggt tgagctaatt ttgtcggaca ccttactata 2040
agcaaatgtt attcagtgcg ttcaatgtat attgacttcc atactgggtt ttccaaaaac 2100
caaaggtagc ttgaaaaaac catgtctgga aatgtttgga gcgttaagct gattgacctt 2160
ctgaccttgg ggctttgagt agtatataat tcataactgc gttaattgta ttgttaaagt 2220
gtttgggagt tttttgcgct tgttatgtgg aaataaagt tttgatttaa aaaaaaaaaa 2280
aaaaaaaaaa aaaaaaaaaa 2299
```

<210> 565

<211> 364

<212> DNA

<213> Homo sapiens

<400> 565

```
ggcacagtga gacaggagcc caggggagaa agacagaaac taagactcaa ggagcaacgc 60
aaagcaaaagt caaggagtca agaccagagt agctgagcag aggccaagaa gggctctgaga 120
gggctgtgca gcagcaatgg ccctaaggat gctctgggct ggacaggcca aggggatcct 180
aggaggctgg gggatcatct gcttggtgat gtctctactc ctccagcacc caggagtcta 240
cagcaagtgc tacttccaag ctcaagcccc ctgtcactat gaggggaaat attttaccct 300
gggtkartct tggctccgca aggactgttt ccattgcacc tgtctgcac cgtttgcgtg 360
ggct 364
```

<210> 566

<211> 2481

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1213)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1214)

<223> n equals a,t,g, or c

<400> 566

```
ggcacgwtg gaccgcgaga cgcgcgccct cgccgacagc cacttccgag gcctgggggt 60
cgatgtcccc ggctgcggcc aggtctcggg ccgggtagcc ttctgtctcg agccggggcg 120
cttctcctac gccgactttg tgcgggggctt cttgctgccc aacctgccct gcgtgttttc 180
```



```
cagcgccttc acgcagggct ggggcagccg gcggcgctgg gtgacgcccg cggggaggcc 240
cgacttcgac cacctgctac ggacctacgg agacgtgggt gtaccagttg caaactgtgg 300
ggtccaggaa tacaactcga accccaaaga gcacatgact ctacagagact acatcaccta 360
ctggaaaagag tacatacagg cgggctactc ctctcccagg ggctgtctct acctcaaaga 420
ctggcacttg tgcagggact ttccggtgga ggacgttttc accctgcctg tgtacttctc 480
gtccgactgg ctgaatgagt tctgggatgc actggatgtg gatgactacc gctttgtcta 540
cgcggggcct gcgggcagct ggtccccgtt ccatgctgac atcttccgct ccttcagctg 600
gtctgtcaat gtctgtggga ggaagaagtg gctcctcttc ccccagggc aggaagaggc 660
cctgcgggac gccacggca acctgcccta cgacgtgacc tcccagcac tctgcgacac 720
acacctgcac ccacggaacc agcttgctgg ccacccttg gagatcacgc aggaagcggg 780
cgagatggtg tttgtgcca gtggctggca ccaccagggt cacaacctgg atgacaccat 840
ctccatcaac cacaactggg tcaatggctt caacctggcc aacatgtggc gcttcttgca 900
gcaggagcta tgcgccgtgc aggaggaggt cagcagtggt agggactcca tgcccactg 960
gcaccaccac tgccaggtca tcatgaggtc ctgctcrggc atcaactttg aagagtttta 1020
ccacttcctc aaggatcatc ctgagaagag gctcctgggc ctgagggagg cagccgctga 1080
ggacggtgct ggggttgggt tcgaacaggc agcctttgat gttgggcgca tcacagaggt 1140
gctggcctcc ttggttgccg accccgactt ccagagagtg gacaccagcg cgttctcacc 1200
acagcccaaa grnntgctgc agcagctgag agaggctgt gatgctgctg cggccccata 1260
gcacctgtcg tgaggataga aggacgggtg gacgagaggc agcctcctgc tccggggccc 1320
ttccagaaat aaagaccgcc ctccctgtga acctggggcc caccctgtc gaggcttggt 1380
gcctggctgt tcatggccac tgcctgggtg cctgttttca ggtgaggccc aatgaggtea 1440
gggacccaag atgggatgtg gcccttctga cctgcagcag gcctgctggg agctcggaga 1500
tggtgccagg acctggctct ttggggggcc ctgcctcctt aggccaggac gcctgagctg 1560
acaggagtct gtgtctggtg tgccttctct ggtggctcct cttaataggc cagccctgtc 1620
ccctcgtctc aggccattgg accaccctg gctctgcctg tgggttcagg gaggggttg 1680
agcagtgtcg ggcaagctca ccagggcctc caggcagggc tggggttggc ctccatcacc 1740
tccaggtgat gggctgtgga accagcgcc tgcgccttcc tctgggtacc cagagtggag 1800
ggctgggttg ggctggcctt tgccacctcc ctgcctttgc agggcctgtg gacagctgga 1860
gaggccacag atggggtgga atcccatctg ctgctgaatc ctcacctggg cctgagggac 1920
tgtgcctgct gtgcactcac agctgggtct tcccaaggat gctgttctca ggagtgggtg 1980
gtcccagacc cctcttcaca ctgggtatga tggaggtgtg ggcgggctcg tccaggccga 2040
tcaaggcaca gcagttagca gcggaggcct gtggtgggga atggactctc gtgggatcct 2100
cttgacagagg atgccccagg cctgaacctt ctagtggatc cacagtttgt ggagactggc 2160
actctcccag ccctgtcctt gaccgagagt ccagcatttt ttcagttggc ccctgggttg 2220
ctgcctcacc ccagcagggg aggaggtatc cgaatccaca gggacggcac gtgccatggc 2280
tatgcacatt gcctgcccgt ggcatacaact ggggccgctg gcacttgtct aggatggaag 2340
cccccaagaa gggcaggggt ttctgtctgc tctgttcagt gaatcatgtg aagtgccttg 2400
aaaggcagct ttacacagta ggtgcttcat atgtgtctgt cgaatgaatg cgctccagcc 2460
aacaiaaaaa aaaaaaaaaa a 2481
```

<210> 567

<211> 1364

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1362)

<223> n equals a,t,g, or c

<400> 567

accacgcgt ccgcagcggg agaacgataa tgcaaagtgc tatgttcttg gctgttcaac 60
acgactgcag acccatggac aagagcgag gcagtggcca caagagcgag gagaagcgag 120
aaaagatgaa acggaccctt ttaaaagatt ggaagaccg tttgagctac ttcttacaaa 180
attcctctac tcctgggaag cccaaaaccg gcaaaaaaag caaacagcaa gctttcatca 240
agccttctcc tgaggaagca cagctgtggt cagaagcatt tgacgagctg ctagccagca 300
aatatggtct tgctgcattc agggcttttt taaagtcgga attctgtgaa gaaaatattg 360
aattctggct ggctgtgaa gacttcaaaa aaaccaaatac accccaaaag ctgtcctcaa 420
aagcaaggaa aatatatact gacttcataag aaaaggaagc tccaaaagag ataaacatag 480
attttcaaac caaaactctg attgcccaga atatacaaga agctacaagt ggctgcttta 540
caactgccc gaaaagggtg tacagcttga tggagaacaa ctcttatcct cgtttcttg 600
agtcagaatt ctaccaggac ttgtgtaaaa agccacaaat caccacagag cctcatgcta 660
catgaaatgt aaaaggagc ccagaaatgg aggacatttc attctttttc ctgaggggaa 720
ggactgtgac ctgccataaa gactgacctt gaattcagcc tgggtgttca ggaaacatca 780
ctcagaacta ttgattcaaa gttgggtagt gaattcagga gccagtaact gactaggaga 840
agctggtatc agaacagctt ccctcactgt gtacagaacg caagaaggga atagggtgctc 900
tgaacgtggt gtctcactct gaaaagcagg aatgtaagat gatgaaagag acaatgtaat 960
actgttggtc caaaagcatt taaaatcaat agatctggga ttatgtggcc ttaggtagct 1020
ggttgtagat ctttccctaa atcgatccat gttaccacat agtagtttta gtttaggatt 1080
cagtaacagt gaagtgttta ctatgtgcaa sggatttgaa gttcttatga ccacagatca 1140
tcagtactgt tgtctcatgt aatgctaaaa ctgaaatggt ccgtgtttgc attgttaaaa 1200
atgatgtgtg aaatagaatg agtgctatgg tgttgaaaac tgcagtgtcc gttatgagt 1260
ccaaaaatct gtcttgaagg cagctacact ttgaagtggc ctttgaatac ttttaataaa 1320
tttattttga taaataatat tgaamaaaaa aaaaaaaaaa ancc 1364

<210> 568

<211> 1606

<212> DNA

<213> Homo sapiens

<400> 568

aattcggcac gaggcggagt ggctgccctg cgcggggaca ctacagagccc ggtgggcggg 60
aggaaggcgg catgcccag acggtgatcc tcccggggccc tgcgccctgg ggcttcaggc 120
tctcaggggg catagacttc aaccagcctt tggctcatcac caggattaca ccaggaagca 180
aggcggcagc tgccaacctg tgtcctggag atgtcatcct ggctattgac ggctttggga 240
cagagtccat gactcatgct gatgagcagg acaggattaa agcagcagct caccagctgt 300
gtctcaaaat tgacagggga gaaactcact tatggtctcc acaagtatct gaagtggga 360
aagcccatcc tttcaaaatc aacttagaat cagaaccaca ggaattcaaa cccattgggt 420
ccgcgcacaa cagaagggcc cagccttttg ttgcagctgc aaacattgat gacaaaagac 480
aggtagtgag cgcttctat aactcgccaa ttgggtctta ttcaactagc aatatacaag 540
atgcgcttca cggacagctg cggggtctca ttcctagctc acctcaaaac gagcccacag 600
cctcggtgcc ccccgagtcg gacgtgtacc ggatgctcca cgacaatcgg aatgagccca 660
cacagcctcg ccagtcgggc tccttcagag tgctccaggg aatggtggac gatggtctg 720
atgacgctcc ggctggaacg cggagtgtga gagctccggt gacgaaagtc catggcggtt 780
caggcggggc acagaggatg ccgctctgtg acaaatgtgg gagtggcata gttggtgctg 840
tggtgaaggc gcgggataag taccggcacc ctgagtgcct cgtgtgtgac gactgcaacc 900
tcaacctcaa gcaaaagggc tacttcttca tagaagggga gctgtactgc gaaaccacg 960
caagagccc cacaagccc ccagagggt atgacacggt cactctgtat cccaaagctt 1020
aagctctgc aggcgtggca cgcacgcacg caccaccca cgcgcactta cacgagaaga 1080
cattcatggc tttgggcaga aggattgtgc agattgtcaa ctccaaatct aaagtcaagg 1140
cttttagacct ttatcctatt gttattgag gaaaaggaaat gggaggcaaa tgctgtctat 1200
gtgaaaaaaa catacactta gctatgtttt gcaactcttt ttggggctag caataatgat 1260

atttaaagca ataatttttt gtatgtcata ctccacaatt tacatgtata ttacagccat 1320
caaacacata aacatcaaga tatttgaagg actctaattg tctttccttg acaagttgat 1380
tttgcaattg tggtaaatag caaataacaa tcttgtattc taacataatc tgcagttgtc 1440
tgtatgtgtt ttaactatta cagtgcattg tagggagaaa ttccctgaat ttcttttagtt 1500
ttgtattcaa acaattatgc cactcgatgc aacaaacata ataaatacat aaaagattta 1560
aaaaawaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gggggg 1606

<210> 569

<211> 1385

<212> DNA

<213> Homo sapiens

<400> 569

ctgggaagag tttcgatgtc tctaggggtg ctagagcgtc ctcccgcgct cagtcgcgct 60
gcaggtgacg gcgcccggag gctgtcgagg agtaggcggg gtgacgtgtg gttgacgagc 120
tcggcgggcg gtttgcgtgag atctgtggcc ggcggcagct ggtgcggggg gcagctgaga 180
gcgagaggtg gatcggggag gtgtgtggcc agggccatga cgggcaatgc cggggagtg 240
tgctcatgag aaagcgaccc cgggggtctc accgagctca ttaaaggatt cgggtgcca 300
ggagcccaag tagaagaaat atggagttaa gagcctgaga attttgaaaa attaaagcca 360
gttcatgggt taatttttct tttcaagtgg cagccaggag aagaaccagc aggtctctgt 420
gttcaggact cccgacttga cacgatattt tttgctaagc aggttaattaa taatgcttgt 480
gctactcaag ccatagttag gtgtgttact aactgtaccc accaggatgt ccatttaggc 540
gagacattat cagagtttaa agaattttca caaagttttg atgcagctat gaaaggcttg 600
gcactgagca attcagatgt gattcgacaa gtacacaaca gtttcgccag acagcaaatg 660
tttgaatttg atacgaasac atcagcaaaa gaagaagatg cttttcactt tgtcagttat 720
gttcctgtta atgggagact gtatgaatta gatggattaa gagaaggacc gattgattta 780
ggtgcatgca atcaagatga ttggttcagt gcagtaaggc ctgtcataga aaaaaggata 840
caaaagtaca gtgaaggtga aattcgattt aatttaattg ccattgtgtc tgacagaaaa 900
atgatatatg agcagaagat agcagagtta caaagacaac ttgcagagga acccatggat 960
acagatcaag gtaatagtat gttaagtgtc attcagtcag aagttgccaa aatcagatg 1020
cttattgaag aagaagtaca gaaattaaaa agatacaaga ttgagaatat cagaaggaa 1080
cataattatc tgcctttcat tatggaattg ttaaagactt tagcagaaca ccagcagtta 1140
ataccactag tagaaaaggg aaaataggat aaaagaacaa ggtgtgagaa ggaatagaag 1200
gaaacaaaca ggaaagatat ggctgcacca tgcagtgtca ctatatgctg agattctaca 1260
ggatgagatt tttgaatagc tgagcagttg cctataatct gtgatgacat aaaagtattt 1320
gacctaaaat ctttttattt gcaaaaataat aaataaaaaa tgattctccc tcaaaaaaaaa 1380
aaaaa 1385

<210> 570

<211> 1144

<212> DNA

<213> Homo sapiens

<400> 570

gcgggggtcag gtcccgtaaa gcagcctggc tcatggctgt gtgcggcctg gggagccgtc 60
ttggcctggg gagcgtctt ggctgcgag ggtgcttcgg cgccgccagg tctgtatcc 120
ccgtttccag agccgcggcc ctccggcgt ggaagacggg gacagggcac agccttcctc 180
gaagacaccc aggatcccca agatttacac caaaacggga gacaaagggt tttctagtac 240
cttcacagga gaaaggagac ccaaagatga ccaagtgtt gaagccgtgg gaactacaga 300
tgaattaaat tcagctattg ggtttgtctt ggaattagtc acagaaaagg gccatacatt 360
tgccgaagag cttcagaaaa tccagtgacac attgcaggac gtcggctcgg ccctggcgac 420

```
accatgctcc tcggcccgagg aggtcactt aaagtatacc acgttcaagg cggggcccat 480
cctggagctg gagcagtgga tcgacaagta caccagccag ctcccaccac tcacggcctt 540
catcctgcct tcgggaggca agatcagctc ggcgctgcat ttctgccggg ccgtgtgccg 600
ccgggcccag agacgtgtgg tgccctcttg ccagatggga gagaccgatg cgaacgtggc 660
caagtcttta aacagactca gtgactatct cttcacgcta gccagatatg cagccatgaa 720
ggagggggaat caagagaaaa tatacawgaa aaatgaccca tcggccgagt ctgagggact 780
ctgaaatcac agaaagtggg agcttggagg atccctccat ggcgatggcc gtggagagag 840
gagcttgccc ttctgggggc ctggttcctg aagagctcac ccagagaggc tcaaagcagc 900
cttttgtccc agctcagctt tgatctacac ctcttgccac cttcctcaag ggactgtgac 960
cctttgggga ttctgtccct gacctgctt ccccaagctc tcctgggtct tggagggatg 1020
tgggaatgaa ttggcattgc aggaaagaca ggtaaaagtga ttgctgcaat gagaaggagc 1080
tgtgcggaaa aggaataaaa gttggaaaagg ctggaaaaaa aaaaaaaaaa aaaaaaaaaa 1140
aaaa
```

<210> 571

<211> 2754

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2610)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2611)

<223> n equals a,t,g, or c

<400> 571

```
ggcctcaagc ttcgctgctg ggcagttggc tggaggggct gctgctggga acacctggag 60
tctccgcggg cagatctcat attttggatt ctggatatat tataatgagt gacactttga 120
cagcggatgt cattggctga agagtgtgaa ttaatggaga acatgcaaca gtacgttttg 180
ctggtgttgt cctccccgtg gcaggacctt ggttaggagt agaattggac aatccccgaga 240
gaggaaagca tgatgggagc cacgaaggga ctgtgtatct taaatgcagg caccggacag 300
gaggatcctt tattcgtccg aacaaggtaa attttggaac agactttctt actgcaatta 360
agaaccgcta tgtgttagaa gatggaccag aggaagatag aaaagagcaa attgtttaca 420
ttggaaataa acctgtggag actatcggtt ttgactctat tatgaaacag cmaagtgcagc 480
tgagcaagtt gcaagaagtt tctctgaggg aactgtgcag taagtgtgac tgggtgaaaa 540
ggaggagtgt ctgaagcatg tcctaataac agaaaggtag atttgtcaaa aaacctgttg 600
tcatcatggg atgaagtgrt acacattgct gatcagctca gacacctgga agtccttaat 660
gtcagtgaat ataaactaaa atttccctcc ggttcagtat taactggaac gctttctgta 720
ctgaaggttt tagtccctca tcaaacagga ataacgtggg ctgaggtgct gcggtgtgtc 780
gcggggtgcc caggcctgga ggaactctac cttgagtcta acaacatttt catttccgaa 840
agccaacaga tgttctccag acagtcaagt tattagatct ttctctaat caattaattg 900
atgaaaatca gctgtatctg atagcccacc tgcccagggt agaacaatta atcctctctg 960
acactggaat ttcttctcta cattttccgg atgctggaat tgggtgcaaa acgtccatgt 1020
tcccatcctt gaagtacctg gtagtaaac acaatcagat atcacaatgg tcgtttttca 1080
atgagctaga gaagttacca agtctacggg ctttgccttg cctaagaaac cccctgacca 1140
aagaggacaa agaagcagag acggcgcgac tactcattat cgccagcatt ggccagctga 1200
agacgctgaa caaatgtgag attctccccg aggagaggcg gagagctgag cttgactacc 1260
```

gaaaagcttt tggaaatgag tggaaacagg ctggtggaca taaggwtccg gaaaaaaca 1320
gactcagcga agaattcctc acagcccatc ccagatacca gtccctctgc ctgaaatatg 1380
gtgcacctga agattgggaa ctcaaaacac agcaaccact tatgctgaaa aaccagctac 1440
taacactgaa gataaaatc cctcatcaac ttgatcagaa agtcctggag aaacaactgc 1500
cgggctccat gacaattcaa aagggtgaagg gattgctgtc acgtcttctc aaagtctctg 1560
tgtcagacct tctgttgtcc tatgaaagtc ccaaaaagcc gggcagagaa atcgagctgg 1620
aaaatgacct aaagtcatta cagttttatt ctgtggaaaa tggagattgt ctattagtgc 1680
gatggtgaca accaactaat aaaattttaa gaccacactg cttatcgtgt ctggggttca 1740
ccggaataa atgattcact ggaacaattc tactgtcaaa acaaagggg tttacaactt 1800
gtcctaagta taacaaggga tgtatttttwt gttgggaagt gaccatttct aggcattatac 1860
ataatagcaa taataaaggc tttgaaccta ctaatgattt tctgatctta tttcatattt 1920
atttttacag ttcactcactg catttcatga taagatttaa atattaaata gaaagaaact 1980
agctagccta ataaaatctg aacacagtta gttaatatct gtcataagac tagttttaat 2040
ggaattctct attgaaacta ctagttttaa gggttactta gaaatgattt ggttggtcat 2100
tttgggaaat gtccctttaa cttggggaga catcctctac tatgtataac aatatgctat 2160
tatctgtctt ctcagttgca ctatttctaa gagtacttaa ataatcaca tgcttttccc 2220
tacaattata cctaagctga gtatatcttc ttctgtgata accagctttg attgaaatgt 2280
actcatatta ggtaaacatt aggcaatgat aggaggaaag caaaactaat tctttcaaaa 2340
tgtcaacaaa atttagaaat atccttcccg atggcactaa aacctgaga ggtatttget 2400
tttattcata ctcacacaac tttagcattt aaaaactatg agtactaaac tgtgaccttc 2460
aggatttatg ttagatggca gaaagaaaat ttgggtatta gtctaccata taaatgaact 2520
tctttaaaac caagggtcag aactgagaat catattgggt cctcttcaag ttagttcaag 2580
ttgccactt cagagatcca caaatctgn ncattatttc cagaaacccc aaactttggt 2640
ataagtgacc actgctcaaa tatgtgatca catgatcaca cagcattcct gtgagttcct 2700
ttttgtctga taattatcct aattagctct acagagctat cctgcaatcc aggt 2754

<210> 572

<211> 2657

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1285)

<223> n equals a,t,g, or c

<400> 572

gcggcacgag cacgtcttgg gcttaggaga agcggccgat ggtcccggcc tgcagtgaca 60
aacccccctc cccgcaccgc cccagcacc cctctcctc ttcacctctt cctgctggcc 120
acgaggaagc cacttctca gagagaccct accagatgcg gatggaaaca gatgcacaa 180
agcaagccct gatgaaaccg cgacttccta aggtctgtct cctctgaact tgcacctggg 240
cctctctgtg tttgggtcca agcacttccc acctcaaaact cccattttca aaccactgta 300
tctctgcgca catctgctac ttaccagccg catacatgat ggagggtttt ttggtcctga 360
tccagtggcc acacgtgtct ttgaaatgtc tcaactgaact ccagttttaa aatagattca 420
ttgcttmaac acagcaagcc caatgcacc agctaagact ggcttgaccg acagcctggc 480
ctttggwggg gggcttctc gggcctgggg aaagctggcc accttcaaca gctggtacct 540
cttcaacagt gtggcctttc aaaatgcaga tgccaccagg agaacatgcc cacagctcac 600
cacctatgga tgccatggct ctgggcagct ttcaaagcag gttcctgtgg tctcctcagc 660
tgtttgaggg ggtaacagca aatcagcctc cattttaaaa tgaaaacacc agcctccaga 720
tgtagggcct gctgggtgtt gctagccgct ggtccccagg cacgggtgcac tttctccacc 780
tcctgcagcc tccctgttgt ttctagactc ttgcacctgg tgagtgaag gataggtgac 840

```

ccaggggcct gcagccttgt cctcagctcc catctcctgg actgccagcc tcaccctctg 900
cagtttagcat ggttggcctg atgcagggat cccgagggat tacttttttag accttctttc 960
acattcagaa aagtagtata gattcaggag aggcagaaa attatgctgt ccatagaagt 1020
cacccatgaa gactgatgcc accacctgaa ggctcatgat tgttaaaaat gtccacggga 1080
acctctcgtc cacaggaggt ttgtctcaac acttcccatt ttacggcat tggcattgca 1140
agcatgggga agtatctgct cttctcatgt taaaagtggc ccagcttttc ttaactcagt 1200
ccaagctgac ttgttttagct gcaactggaat ttcttaccac ccaaatattt gcacgagca 1260
aagggggctg tgtgcacctc cctanatggc agcgatgatg gctgctgtca ttcacgcca 1320
tcttcagacg tcacagtctg gaagtgaat gtccacaaac atctgtggca gaaaaggcta 1380
tacggaccac ccagttgtsc tgcagcttta cagagcaagg aagggttgtg gcaataaat 1440
gattaacctg cctcgactgt gctgagggca acaaaggcca tctaccacaa ggattattcr 1500
atgccattaa atcatcccgt gaccttcctg cttccgagtc catggccttt gcccagggca 1560
tgtactcccc tgagaggcct tctgcctaga aagatctatg actgggttcc aaagttagag 1620
cctaggtttt tgctgggatt tagatatttt caggacacat tttgacagca ttcaggaaaa 1680
cggttattga ccccatagac tagggtaaga ataaaggcaa taaatttggc ctgactcaga 1740
atataggaga tccatataatt tctctgaaaa ccacagtgtc cactaaaatg tgaaattgaa 1800
ggttttgtta aaaagaaaaa gataatgagc ttcagtcttt gtttaattac ataatgattt 1860
ccattacgct atttctgtga aatgcagcag gttcttaaac gttatttcag tggcatgggc 1920
tggaagctta tcacaaaaag ccagtgtgtg ggccattatc gaacagaaag agacaggctg 1980
gtgcccagg ctgctgcctg ctccaccttt tgccagctct ggacatctga ggacgtcccg 2040
gcagatctgg aatggggccc tcaactgacc atttgcttct cagaatttca gtttgagaca 2100
tgagaggtat aatcagttac ttttctcccc ccagagaaac ccttttgtga ggggagagga 2160
gctatgggat gtggttcagc tgaaacacat acaactgcat ccttttggag tcctttgcca 2220
acaaaaacag accaacagac cagatgggtg ccagtgtcaa tatcatgtct tgatggacgc 2280
agctgatgac ctcaataact tgagtggctc catggctgtt agatggatta tttgaaaaag 2340
gactccaaaa ggatgcagtt gtatgtgttt cagctgaacc acataccata gctcctctcc 2400
cctcacaaaa gggtttctct ggggggagaa aagtaactga ttatacctct catgtctcaa 2460
actgaaattc tgagaagcaa atggtcagtt gagggcccat tccagatctg ccgggacgct 2520
ctcagatgtc cagagctggc aaaaggtgga gcaggcagca gcttgggcac cagcctatct 2580
ctttctgttc tgataaggcc acacacatgg ctttttgtga taagcttcca gcccatgcca 2640
ctgaaataac gtttaag 2657

```

<210> 573

<211> 2352

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2096)

<223> n equals a,t,g, or c

<400> 573

```

gggcagacgg aggctggggg gaggactttg agtcctgcga ggagcggcgt tatgtgcaga 60
gtgccagtc ccagatccat aacacatgct gggccatgat ggggctgatg gccgttcggc 120
atcctgacat cgaggccag gagagaggag tccgggtgtc acttgagaaa cagctcccca 180
atggcgactg gccgcaggaa aacattgctg gggctctcaa caagtcctgt gccatctcct 240
acacgagcta caggaaacatc ttccccatct gggccctcgg ccgcttctcc cagctgtacc 300
ctgagagagc ccttgtctggc caccctgag aacatgccta cctgctgggt gccgtctgtg 360
cgttccagtg aggccaaagg gtccctggccg ggttggggag ccctcccata accctgtctt 420
gggctccaac cctcaacct ctatctcata gatgtgaatc tggggggccag gctggaggca 480

```

gggatgggga caggggtgggt ggcttagact cttgattttt actgtaggtt catttctgaa 540
agtagcttgt cgggcttggt tgaggaaggg ggcacaggag ccgtgacccc tgaggaggca 600
cagcgccctt tgccacctct gggcacggcc tcaaggtagt gaggctagga ggttttttct 660
gaccaatagc tgagtctctg ggagaggagc agctgtgcct gtgtgattcc ttagtgctga 720
gtgggctctg ggctgggggt ggccttgggc aggccttctc tgcacctttt gtctgctggg 780
ctgagggaca cgagggaac cctgtgacaa tggcaggtag tgtgcatccg tgaatagccc 840
agtgcggggg ttgctcatgg agcatcctga ggcctgtcag caggagagccc catgcccctg 900
ggtcgtgagc ttgcctgcgt atgggggtgt gtcatggagc ctcatgcccc tgggtcgtga 960
gctcgcctga gtatgggggt gtgtcatgga gccgcatacc cctgggttgt gagctcgcct 1020
gcatacgag ggtctgtcat ggaacatccc aagtctgtgc agcaggagagc cccatgcccc 1080
tgggacatga acccacctgc gtggaatgct gtttgtgagg tgtctacagg gtttatagta 1140
gtcttgtgga cacagaaatg cacaggggac acttacggac acagaaatgc acaggggagg 1200
ccgagcataa ccaggggtga rgggcaggca gcagttgtag ttactgccgc ggggcactgc 1260
tatgtgcagg gacagccagc gccacgccc caccactcc ctgggctggc tggcaggtat 1320
ggcaccttgg gagcccgga tatacccagg gcaccctac ggctgccgc agtctcatgc 1380
ccaggtgggt gctctgggct ggagcgaggg ccaggttttg ggccgaggct tccccaggca 1440
atcctgtgag ctcccttcta gcctctgacc cagtctggtc tggcttgcat ggatgtaggg 1500
cttgggggtg gaagttcagg tcctggcttt gctttgcctg atgtggatga gcagctcaca 1560
tgctcagggc cacctgagac tgtcactgct ctccctggc tactgggagg agtactgag 1620
agcttcgtta cccctgctgc cttgcccagg gcacacccta tacctcctya tctgctcttc 1680
ccctccctgc cgccttctgg gcaggtagca gtccctggcc tctccccctg gctgatact 1740
ctccctcagg cagtggagat ctgcgtctgg acaccctcag atcctgtcat tgcctgcccc 1800
gagtccttca ggggcacccc tctgccttgg tgtgcrgtcc agggctctca cccagggtgc 1860
gcaccctctg gggctctctg tccagctccc ttgccccatg tgctgtcact gactctcctt 1920
gggactcgc tgcctgctca gagccctgca gggcttggc agctgcctgt tcagtgtcaa 1980
cacttcctg cacatcttaa aactgggctt ttttttctg gaaggaaactg tgttgggacc 2040
cttgacatct gtcaggtttg cacatgctgt tttttttct cagcccacgt gttctncccc 2100
acgtggggta gcagcaggac agacagtga tcacagagtc tgccctgagc agaggctgct 2160
gtccctggga ctcctagcca tggtcagact gtacaaaacg gttttccaga aatgaaatgt 2220
aaatccattt ttatactgaa aatgttactg aaagtcaatt ttatgagcat ctgccttaat 2280
aaacagacat tgattccctt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2340
aaaaagtcga cc 2352

<210> 574

<211> 328

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<400> 574

```
naagctggnn ctccaccgcg gtggcgggcg ctctagaact agtggatccc ccgggctgca 60
ggaattcggc acgagtttct ttgtttgttt gtttttttct ctaaaaacaa acagcaaaag 120
acagctgaaa acaagaactt caccgggtggg caggcaagaa ttctcttctg gaaaatgacg 180
tttgtggctc tttcccaagt tggccttcaa agagcctgcc tgcygttgag ccagaagatg 240
tctcgtgtga aggctggggg ggcggtctgc ttggaacctc tgtgagcagg aggccctaag 300
ccgcagcagt ggatagaggt gcagatct 328
```

<210> 575

<211> 1678

<212> DNA

<213> Homo sapiens

<400> 575

```
ggcacgaggg gcccttcytc ttctgtgcgc tcgggctcct ggtcccggct ccccggttac 60
cggggcgcgga gtatgaccac aatggcgggc gccaccctgc tgcgcgcgac gcccacttc 120
agcggctctcg ccgccggccg gaccttctct ctgcagggtc tgttgcggtc gctgaaagcc 180
ccggcattgc ctctcttggt ccgcggcctg gccgtggagg ccaagaagac ttacgtgcgc 240
gacaagccac atgtgaatgt ggggtaccatc ggccatgtgg accacgggaa gaccacgtcg 300
actgcagcca tcacgaagat tctagctgag ggaggtgggg ctaagttcaa gaagtacgag 360
gagattgaca atgccccgga ggagcgagct cgggggtatca ccatcaatgc ggctcatgtg 420
gagtatagca ctgccgcccg ccactacgcc cacacagact gcccggttca tgcagattat 480
gttaagaata tgatcacagg cactgcaccc ctgcagcgtc gcatcctggt ggtagcagcc 540
aatgacggcc ccatgcccc aacccgagag cacttattac tggccagaca gattgggggtg 600
gagcatgtgg tgggtgatgt gaacaaggct gacgctgtcc aggactctga gatggtggaa 660
ctggtggaac tggagatccg ggagctgtc accgagttg gctataaagg ggaggagacc 720
ccagtcacgt taggctctgc tctctgtgcc cttgagggtc gggaccctga gttaggcctg 780
aagtctgtgc agaagctact ggatgctgtg gacacttaca tcccagtgcc cgcccgggac 840
ctggagaagc ctttcctgct gcctgtggag gcggtgtact ccgtcccctg ccgtggcacc 900
gtggtgacag gtacactaga gcgtggcatt ttaaagaagg gagacgagtg tgagctccta 960
ggacatagca agaacatccg cactgtggtg acaggcattg agatgttcca caagagcctg 1020
gagagggccg aggccggaga taacctcggg gccctggtcc gaggcttgaa gcgggaggac 1080
ttgcgggcgg gcctggtcat ggtcaagcca ggttccatca agccccacca gaagggtgag 1140
gcccagggtt acatcctcag caaggaggaa ggtggccgcc acaagccctt tgtgtccac 1200
ttcatgcctg tcatgttctc cctgacttgg gacatggcct gtcggattat cctgccccca 1260
gagaaggagc ttgccatgcc cggggaggac ctgaagtcca acctaatctt gcggcagcca 1320
atgatcttag agaaaggcca gcgtttcacc ctgcgagatg gcaaccggac tattggcacc 1380
ggtctagtca ccaacacgct ggccatgact gaggaggaga agaatatcaa atgggggtga 1440
gtgtgcagat ctctgtcag cttcccttgc gtttaaggcc tgccctagcc agggctccct 1500
cctgcttcca gtaccctctc atggcatagg ctgcaaccca gcagagggca gctagatgga 1560
catttccctt gctcggaagg gttggcctgc ctggctgggg aggtcagtaa actttgaata 1620
gtaagccaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaac 1678
```

<210> 576

<211> 2508

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (2443)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2464)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2472)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2494)
<223> n equals a,t,g, or c

<400> 576
gcgtcggcgk cygggcaccg ccattttggc cgggtggccgt gagaacacgc tgtgtggctg 60
aaaagtgaag gcaagagctg atttgccctc tgtgctcccc tccgcaaggg gatcgttttc 120
tccagaagag ctggatattc ttctgcccag ttatggcaga caagttaacg agaattgcta 180
ttgtcaacca tgacaaatgt aaacctaaga aatgtcgaca ggaatgcaaa aagagttgtc 240
ctgtagtctg aatgggaaaa ttatgcatag aggttacacc ccagagcaaa atagcatgga 300
tttccgaaac tctttgtatt ggttgtggta tctgtattaa gaaatgcccc ttggcgccct 360
tatcaattgt caatctacca agcaacttgg aaaaagaaac cacacatcga tattgtgcca 420
atgccttcaa acttcacagg ttgcctatcc ctctgccagg tgaagttttg ggattagttg 480
gaactaatgg tattggaag tcaactgctt taaaaatttt agcaggaaaa caaaagccaa 540
accttggaag gtacgatgat cctctgact ggcaggagat ttgacttat ttccgtggat 600
ctgaattaca aaattacttt acaaagattc tagaagatga cctaaaagcc atcatcaaac 660
ctcaatatgt agaccagatt cctaaggctg caaaggggac agtgggatct attttgacc 720
gaaaagatga aacaaagaca caggcaattg tatgtcagca gcttgattta acccacctaa 780
aagaacgaaa tgttgaagat ctttcaggag gagagttgca gagatttgct tgtgctgtcg 840
tttgcataca gaaagctgat attttcatgt ttgatgagcc ttctagttag ctagatgtca 900
agcagcgttt aaaggctgct attactatac gatctcctaa aaatccagat agatatatca 960
ttgtggtgga acatgatcta agtgtattag actatctctc cgacttcacg tgctgtttat 1020
atggtgtacc aagcgccctat ggagttgtca ctatgccttt tagtgtgaaga gaaggcataa 1080
acattttttt ggatggctat gttccaacag aaaacttgag attcagagat gcatcacttg 1140
tttttaaagt ggctgagaca gcaaatgaag aagaagttaa aaagatgtgt atgtataaat 1200
atccaggaat gaagaaaaaa atgggagaat ttgagctagc aattgtagct ggagagttta 1260
cagattctga aattatggtg atgctggggg aaaatggaac gggtaaaacg acatttatca 1320
gaatgcttgc tggaagactt aaacctgatg aaggaggaga agtaccagtt ctaaatgtca 1380
gttataagcc acagaaaatt agtcccaaat caactggaag tggtcgccag ttactacatg 1440
aaaagataag agatgcttat actcaccac aatttgtgac cgatgtaatg aagcctctgc 1500
aaattgaaaa catcattgat caagaggtgc agacattatc tggtggtgaa ctacagcgag 1560
tagctttagc cctttgcttg ggcaaacctg ctgatgtcta tttaattgat gaaccatctg 1620
catatttgga ttctgagcaa agactgatgg cagctcgagt tgtcaaacgt ttcatactcc 1680
atgcaaaaaa gacagccttt gttgtggaac atgacttcac catggccacc tatctagcgg 1740
atcgcgctcat cgtttttgat ggtgtccat ctaagaacac agttgcaaac agtcctcaaa 1800
cccttttggc tggcatgaat aaatttttgt ctcagcttga aattacattc agaagagatc 1860

```
caaacaacta taggccacga ataaacaaac ttaattcaat taaggatgta gaacaaaaga 1920
agagtggaaa ctactttttc ttggatgatt agactgactc tgagaatatt gataagccat 1980
ttattaaaag gagtatttac tagaattttt tgtcatataa aacttgaatc aggattttat 2040
gccccacata ctctggaact tgaagtataa tataacttaat ataacataaa aagccagttg 2100
ggttctaaat tgtagttgaa acacagaaaa tgccactttt ctgttcctga agaggctctt 2160
ttgtgcataa tattctaaaa tgaagacatt tcaagctata caaattactt ccaagttttc 2220
atgatgtatg ggaagatttt cagtaggtgt attatattca cggtagcaaa tgctgaccag 2280
tgttgctcca ttttttaaat cttgaaaagg gtttctgtac ttacctggtt tgccaagtat 2340
gccagtgtaa tgaaactgcc cttattttta aagccagtca aagattccac tgattgacat 2400
ttgataaata aacatcagga ttawgtttat gttggtttcc acnccttggc ctatttacca 2460
tttnggtttc cnagaaaatt tctacgcaa accncttttg gaaaaagg 2508
```

<210> 577

<211> 1531

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (431)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (433)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (435)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1525)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1530)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1531)

<223> n equals a,t,g, or c

<400> 577

```
ggccgcctgc tcctcatgac ccaagcaaag cagctgcagc grccgcggac cccaacgcyg 60
cgtggggcgc ctactactca cactactacc agcascctcc gggccccgtc cccggccccg 120
caccggcccc tgcggcccac cggctcaggg tgagccccctc agccccccacc caccggccag 180
```

```

tcggactaca ctaaggcctg ggaagagtat tacaaaaaga tcggccagca gccccagcag 240
cccgagcgc cccacagca ggactacacg aaggcttggg aggagtacta caagaagcaa 300
gcgcaagtgg ccaccggagg ggtccaggag ctccccagg ctcccagcca gactacagtg 360
ccgcctgsg aatattacag acagcaggcc gttactacg gacagacccc aggtcctggc 420
ggccccagc ngncnccac gcagcaggga cagcagcagg ctcaatgaat cgaatgaatg 480
tgaacttctt catctgtgaa aaatcttttt tttttccatt ttgttctgtt tgggggcttc 540
tgttttgttt ggcgagagag cgatggctgc cgtggggagt actggggagc ctcgcggcaa 600
gcagggtggg ggggacttgg gggcatgccg ggcctcact ctctcgctg ttctgtgtct 660
cacatgcttt ttctttcaaa attgggatcc ttccatgttg agccagccag agaagatagc 720
gagatctaaa tctctgccaa aaaaaaaaaa aaacttaaaa attaaaaaca caaagagcaa 780
agcagaactt ataaaattat atatatatat attaaaaagt ctctattctt cccccccag 840
ccttcctgaa cctgcctctc tgaggataaa gcaattcatt ttctcccacc ctcggccctc 900
ttgtttttaa aataaacttt taaaaaggaa aaaaaaaagt cactcttgct atttcttttt 960
tttagttaga ggtggaacat tccttggaac aggtgttgta ttgcaggacc ccttccccca 1020
gcagccaagc cccctcttct ctccctcccg ccttggtca gctcccgcg ccccgccgt 1080
ccccctccc aggactggtc tgtgtcttt tcactgttct aagaggagat tgaaactgaa 1140
aacaaaatga gaacaacaaa aaaaattgta tggcagtttt tactttttat cgctcgtttt 1200
taacttcaca aataaatgat aacaaaacct ccccgctgc ggtgtgtgc tgtctcccc 1260
ccttctcttc cctccctgta gtttgaagc ggatgttgt tctttataga tgtgtttta 1320
aaagcctgat aatggtgatt gaaatttaca aacttttgt ttttttttt ttaagaaaaa 1380
tataaaatag ttttcttcag gctcaatgtg ctttcctaac cgtgcccccc ccccttttt 1440
tttttgtta aataaagtgc ttttgttta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
aaaaaaaaa aaaaaaaaaa aaanaaaan n 1531

```

<210> 578

<211> 1244

<212> DNA

<213> Homo sapiens

<400> 578

```

gtgggagact acagagttgg ggctcccaa cccccaggg ttaacatgac tccccctctga 60
caataatggg tgacctgtca ctgttttttg tatattgat cttaaccca ttctcccaga 120
gaatacaatt catggaaatt ttacctaac ttggcatggg gtatcatggag ctacaggttag 180
gaggcccaga actggagagc taaggcatac ttcatcagct tagcacatga cgaactgtctc 240
tccagactgc gtggagtgca tggcgtgttc agacaacaca gttcgtgctg gcctgacacc 300
caagttcatt gatgtgcaa ccctgtgtga aatgctcagc tataccccta gctccagcaa 360
ggacaggctc tttctcccaa cacggagtca ggaagacccc tacctctcaa tctatgaccc 420
ccctgtacca gacttcacca ttatgaagac ggaggtccct ggctctgtca ctgaatacaa 480
ggtcttgga ctggactctg ccagcatcct cctgatggtg caggggacag tratagccag 540
cacaccaca acccagacac caatccctct gcaacgtggt ggcgtgctct tcattggggc 600
caatgagagt gtctcactga agcttactga gccgaaggac ctgctgatat tccgtgcctg 660
ctgtctgctg taaaggctgc agcctcccca gctctcctct gccagccacc ctaaattcca 720
gccaacctca cctcctcggg cccagctcaa gccccttcc ttgctctgga ccccttaagt 780
ataccctgga agagctgggg tggggaggga gggagcgtga aggtagtga tccctgaac 840
accaggtgg aacctcttt ggggaggaga gggcctgtg aggggtctga tactccctt 900
gtcttccctc tctactcctc gctacacctg agccaggctc ttgccaactc tgttccagcc 960
tatggcttta ggctagctgt taaatatgtg acccagcatt agctcagcat ctgtcagagc 1020
aagagaccag gtaatttcta agaacagggt tctagcgtg ggactgcca ttctctcagc 1080
tgcaaggagg gaaagggaaa gggtaggcct gtagactaac gctgtttaca cccttgttct 1140
gtcaaagcaa ttaaatgata cttgtgttga ggctgtggg taatgagcac tcagcctttg 1200
gggtacctgt tcctaaagtg ggccaaaaga gccctcccta caaa 1244

```

<210> 579
<211> 2525
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (76)
<223> n equals a,t,g, or c

<400> 579
acgggggatgg ggtcccccaa gnacgcctta agaagaaagc acacagttag gattacctgt 60
gggctagcat agaggnaagg ataatcctga aggttggagt cttaacatct gggactcctg 120
aacttctgaa gactgacttc tcttgggggt ttaggcattg ccagcattga cagcagtgcc 180
cctgaaacaa catcggatag ttccccacc ttaagccgga gaccacttcg agggggctgg 240
gccccacct cctggggctg aggtcaggac agtgacagca ttagcagctc ttcttcggac 300
tccctgggct cctcatcctc cagtggaaagt cgccgggcca gtgccagtgg aggagcccg 360
gcgaagactg ttgaagtgg caggtacaag ggccgcccgc ccgagagtma tgcccctcat 420
gtaccaaatc agccatcaga ggcagctgca cacttctact tcgagctggc gaagacagtg 480
ctgatcaagg cagggggcaa cagcagcact tccattttca cacatccatc ttccctcagg 540
ggccaccagg gtcctcaccg caacctgcac cttgcccct tcgagattgg gctttatgcc 600
ttggcctgca caactttgtt tctcccaact ggctctcacg tacttattct tcccacgttt 660
cctggattac agggccaggcc atggagatag gcagcgcagc cctgactata ctggtagaat 720
gctgggatgg gcacctgaca cccctgagg ttgcatccct ggctgacagg gcatcacggg 780
caagagactc caatatggtg agggcggcag cagagctggc cctgagctgc ctgcctcacg 840
cccatgcatt gaaccctaag gagatccagc gggccctggg gcagtgcaag gaacaggaca 900
acctgatgtt ggagaaggcc tgcattggcag tggaaaggcc agctaagggt gggggcggtg 960
accctgaagt gttgtttgag gttgctcacc agtggttctg gctratatgag caaactgcag 1020
gtggctcatc cacagcccgt gaaggggcta caagctgtag tgccagtggg atcagggcag 1080
gtggggaagc tgggcgsggt atgcctgagg gttagagggg cccagggact gagccggtta 1140
cagtggcagc ggcacagttk acagcagcag ccacagtggg gcccgtcata tcggtgggg 1200
ctagtttata cccgggtcca ggactggggc atggccactc ccctggcctg caccctaca 1260
ctgctctaca gcccacctg ccctgtagcc ctacgtatct cactcaccca gctcacctg 1320
cccaccccat gcctcacatg ccccgccctg ccgtcttccc tgtgccagc tctgcatacc 1380
cacagggtgt gcatcctgca ttcctagggg ctacgtaccc ttattcagtg actcctcct 1440
cacttgctgc cactgctgtg tctttcccgc ttccctccat ggcacccatc acagtacatc 1500
cctaccacac agagccaggg cttccactgc ccaccagtgt ggccttgagc agtgtccatc 1560
cagcatccac gtttccagcc atccaagggt cctcactgcc tgccctgacc acacagccca 1620
gccctctggg gagcggagggt tttccaccgc ccgaggagga gacacacagt cagccagtca 1680
atccccacag cctgcaccac ctgcatgctg cctaccgtgt cggaatgctg gcactggaga 1740
tgctgggtcg ccgggcacac aacgatcacc ccaacaactt ctcccgtcc ccccccctaca 1800
ctgatgatgt caaatgggtg ctggggctgg cagcaaagct gggagtgaac tacgtgcacc 1860
agtctctgtg gggggcagcc aagggggtgc tgagcccgtt tgtgctgcag gagatcgtca 1920
tggagacgct gcagcggtg agtcccgtc atgcccacaa ccacctgcgt gccccggcct 1980
tccaccaact ggtgcagcgc tgccagcagg catacatgca gtacatccac caccgcttga 2040

```
ttcacctgac tcctgctggac tacgacgact ttgtgaatgc gatccggagt gcccgacgcg 2100
ccttctgcct gacgcccatt ggcatgatgc agttcaacga catcctacag aacctcaagc 2160
gcagcaaaca gaccaaggag ctgtggcagc gggctcact cgagatggcc accttctccc 2220
cctgagtcct tcaccttag ggtcctatac agggaccag gcctgtggct atgggggccc 2280
ctcacacagg gggagtgaac cttggctgga cagatcatcc tcaactcagt ccctggtagc 2340
acagactgac agctgctctt gggctatagc ttggggccaa gatgtctcac accctagaag 2400
cctagggctg ggggagacag ccctgtctgg gagggggcgt tgggtggcct ctggtattta 2460
tttggcattt ataaatatat aaactccttt ttactctaa aaaaaaaaaa aaaaaaactc 2520
caggg                                     2525
```

<210> 580

<211> 4006

<212> DNA

<213> Homo sapiens

<400> 580

```
tcgagttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 60
tctgaataga gaatatattat aacttttgta tgagagagaa ttcacactca acaagacact 120
accagcacca cgtttacaga ggatgaaaac acttcacagt ctcccagagc cgatcgctct 180
ctcccccgcc ccaccccgctg cttcagcctt gcagggagag tgatgctcca ggcaacacgg 240
ttctgagtca ccttctgaca cgagctccct ctgcttgett tccaggtctt gaaaatctga 300
attcacttca gtttagttta tgaatttttag gtttcatgat aagcctcaak tgtagttgga 360
cttttattga atccttctta agttattgaa aaaatgtctt ttcattggtga atgacaatat 420
ttatggtgcc ttttagcttct tgaagattta gaagttatat aaaaaattaa tttaaaagca 480
aaccaaaaga ggtttccatt aacattatga ttttaaccatt gtatttaatt tcccacctta 540
tgaaacacaa cagcagctcc ctgactgggt cgcctttcat tgtgtgaggt cggcacttgg 600
actcactcag aactgtcgct cactgtggc tgacacaccc agccctggaa acggggcccc 660
agacgccacg tcgggatttc tgacatgctc agcaggtaga ccagaggccg tgtgaccagc 720
tcagtgtctg tttacggaac aactcttact tttaaaaatt acttgttccc ccaaattgtt 780
gagtgcgcgc gtttggtttc ctatgttttc tttccctgtt ttgattttgc tgaagggaga 840
gggtggtggt gttaggatca gagctctcct ggcatccgtg gggaggattt gctggtggtg 900
gcttcgggct yatgccagac aactcactg ccccgctctg ccaaggcctc cccttcccct 960
ttgctggttg gaggagctcg tgtgctcctt ggccgcttac tggaaaggcg tttttcagag 1020
ctgcagggac aggggtgagca gctgaagggc taggagggaa gccggccccc gctctgcaga 1080
agctgcattt cagctgaatc tgtgtttcag cctcagttgg ttgcaccgtt agcccctctc 1140
ctcccgatg gtcattgttt tgtcacatta gagaataaac agccacacac acattttttt 1200
ttttccttta aaacagtaac ttggaaatat gaaaaggcca gaaggaggag caagggtgt 1260
tttctggagt ggttgaggtg ttgtcctgca gttgtcattg tcttctccac cgggctgttc 1320
ccatttattt cctgtggaac tgaatccctc ctccctccac tccttgggag cccaggtggt 1380
ccttgggcac cattcaggct ttccaagaag ccaaccactc tggagatttt ttttcttgaa 1440
tttcgctggt ttcttctgct tccttttagat aaaaagcagc tcaagagacc ttatcttagg 1500
gatgagaaaa acatgcatat taattccatc tgagtgattg tcagtgtaa gctttttaa 1560
acaaaagcaa gttctttggt aggaattggt caaaattcat ctctttcttt argcccatca 1620
actcccagga cggtttgagt tactcagtta cctaagcttg ctattcatcc aaatcatttt 1680
ctagagtcat tgtataaggg tctatgagta gctgtgatg aataaatatt acctgtctac 1740
ctcaaaatac acataactct agcattctg tacaaccgtg tgttatcaca gtgcagtttt 1800
aagtgtaacg ttagaactta ggcattttcc tgtgtggcg aataagaaag gattaaacag 1860
ttacaagcct ccaaattcaa ataaaattaa atcacagttc agatgaaact gaatatcatt 1920
gtaataatct cataatatat atttgtaact ttgtagctat ctttgaaatc acttgacttt 1980
gcaatggtgc taagctgata gatttaaata cacagacggg cgagtggcgc ccgtgtcgat 2040
gtcttcagcc agtggtgacc ctgcttttgt aaccgcgtta acctgacaaa acctcagcag 2100
```

cagaartccc tattttttcta rgartcatcg tgcagacagt cttcactaca ggactygccc 2160
tggggcctct gcctctcgtc tgaccttgca gccttagtcg ttggaggctg gagcgcaatg 2220
gccctgccgt ctgtggagcc tctgggcggc cttctttcct ttctgtcaac ctctcatttc 2280
acagmaaaag gctgaatttc attttttcca gcatgaaagc caggatcggg tagtggttgg 2340
attctattgg tttttttttt aaacagatgg agttactgtg aagaagtttt cacaactatt 2400
tatgctggta aaacaaatgc tgtaaatca ctttatgcgt cgttttcaac agcagtgggg 2460
ctaattaccc ggaatacggg ctcaccgatg cagttttcat ggacatagaa aattcaaata 2520
gaatatataa tattgaattt aagatttggg gggtaaaaa agaaaactta actttataaa 2580
attatttatt ctattttaag cttctatca tattttocca tccaattggt ttggtttcagt 2640
gggtccagctt tatttacagg catataaaat gaaattgtga gatgttttgc aagcttcttt 2700
ttactttgag tagcttttaa tttgtatggt tttatgtgga tgaagagcat tttttatgct 2760
tttgtcaaat aggttccaat atgcatttat tagacatctg tttaaattggt aatgtagcat 2820
ttattttgct aaattgaaag ggaacataga tggaattcca aaatatgtac attcagctgt 2880
ttggtttttc gtttttcatt gttattattg tgagaatgct gttattgggg ttgtgtgtga 2940
gtgccggtca gccagtgatg cctcggggcca cgctgtgggg ccacctcagt cctgcctggg 3000
tcctggtgcc ttggacccca cgtgcttgtg gccaggtgc ccctgggcgg ggccatgtgg 3060
cctcagacca caagagcgga gctgccctgg cccaagcact gcagctgcct gcacccccgg 3120
gcttcgcagc cttgcttgtt ttctctgaac agcaacagaa cagtgttcac agcgattcaa 3180
aggggtggcat tgggttggac gttctgggta caagccaacc tagtcccacg ttgtacgtga 3240
atgtttaatg tgctctcaaa acatggaaaa taagttagt gcacatagct aaatcacaaa 3300
acatccaatt tctctgtttc ctcaggaagt cttactgctg ccaccacatc acatgacctt 3360
aacatgatca atgtatttct ctgccttgac atttaaatac ataaattgag ataagtagat 3420
tagaaaaatca ttcaaatgat accataattt gtacgggaca ggggtgcgggc aatggccacg 3480
tggccaaggc cccgcaggaa cgcgccgagg tctccctcac cctccagggt tccttcgcac 3540
ccaacagtg gctgagga gtagctgcag tttagcgtt cccctgagat gtgcgtagcc 3600
tccgtgtaaa tgtccactcc catggcttaa ttgcctatca gacgcatttt cccagacgaa 3660
agcaatgttg ggttggggaa gacagtgcag ccaccagcc ttaccagca gcgtacggca 3720
gacgaaggca gtcgaggtgt ggaggtgatc acgaagatac atgtgtttga ctgtttaatt 3780
tgaaagttaa cattttttat gctttgtgtt ggtgtgtaat ttttgtactc ttggtggcta 3840
gtttttgtca aatctttttt ggaatattgc ttaaatgttt tgattttatg atagtgaagc 3900
ttgtattcag tgttttgcca attaatatta tatgcttgta ataaaagcaa aagaaaagct 3960
taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 4006

<210> 581

<211> 565

<212> DNA

<213> Homo sapiens

<400> 581

gagtgggcgg agtgccgggg tcagttgggt caastgtccc ggccctgaggt gtcggccgga 60
tccctccttc tcccggcgcc tcaagcgga gaccattcct caagaatttt gtatccaagg 120
cccaaaagtt tgttacccaa gatgatgaat gctgacatgg atgcagttga tgctgaaaat 180
caagtggaaac tggaggaaaa aacaagactt attaatcaag tgttggaaact ccaacacaca 240
cttgaagatc tctctgcaag agtagatgca gtaagggaag aaaatctgaa gctaaaaatca 300
gaaaaccaag ttcttggaca atatatagaa aatctcatgt cagcttctag tgtttttcaa 360
acaactgaca caaaaagcaa aagaaagtaa gggattgaca cccttctgtt ttatggaatt 420
gctgctgatc attttttctt taaaacttgg atagattcca aaagttacag tacctttgtg 480
gcttcattgg aatattttat raggrtaatg tcaggatgtw gggacmaaaa ttaamcacaw 540
taacmggaga cttcctaagg tttgt 565

<210> 582

<211> 2528

<212> DNA

<213> Homo sapiens

<400> 582

```
aagattggaa cgatctcagc caaatatttt aggtgtaatt catatgtatt tgagtggagg 60
atTTTTtttc tcatttttct agtgttaaat ttttaaccagc attaacatgg tagagtggag 120
gagtgagtggt gttcaaagat caacatattt aactttttaa cactatctca aagccagcat 180
aattaactac tttgattgtg ggctgacctt tgTTTTttta acaatcaggc atttttaatt 240
agataatcca ctcatgtatt tccccctcac tgcagttgtc tgcattttta gcctcttttc 300
tcttcgttag ttgtcagaat atgccttcgt caaggctcag aggtaacaag acagaaaatt 360
catctgggat tttcctgctg tggtggcac attcttctga ttaacagaca cttgtatgat 420
gctttaggct agttagtgc ttttttagca aacatttatc ttaaacaatca cagatccact 480
ggggggtgca aggggctact gttagtctc ttgtagatg cagtcactcc tcctggtcac 540
ctagttagca gggacagagc caggagtcaa gtgcagtgcc aagggtgatg accctctgag 600
aagtcactgg gctgatttga cctccgactc attgggtgtg caaatgccat gtgcagcctt 660
tcctgaggcc ataggagggc ttcctgcagc tgagatctat gcaggccatc ctctcaacar 720
gtgccactcc aagggcggtc ctcggtgcag cagcakcagc ttcacttgtg ggggggtggg 780
ggaargggcg gtctcagaaa tgcaggttcc caggctccac cctggacttc tgaaggggtg 840
tggtcatctgt gtttctgatg cttactacaa tatgtgaacc actactttag aaaatctgct 900
ttaacttggt attcctctaa ttgtgttccc taggaaatga ctgtcccaag agccagtgat 960
tattccaggt gttccctgga aaggccaagt gagtctggga aacactatgt ctgtacacct 1020
cttgaagggt tcgaatgtat gtttatacat cagtggaaac catttttcta gcctagcaag 1080
tcccaaacac attacactga agagattttg gtgaggaaac ttgctggagt tttcagggaa 1140
cactgttcta ggcttaggtg accttaggat cactcaagta gacccttcac tccctgcgag 1200
aaattaggat gaataactac ctgtggcatt gttggttctg aacttttaca gttcaggcct 1260
gctgtgaatc tttgatgaag ctttaagggtg acactgttgt acaagatgtc agctttgctg 1320
aaacgcacat tacctggaat aagtgttcta attgtagaat tagaatggga tttactgtac 1380
tgttttaaata gagattggct tcagaatcca ttacagttac cttacatagc acttgatacg 1440
tgttaaatga acatatgaat gtaatttata tattcctaga atttaagtta ctttgtgaga 1500
tttgggcctg tccctcaayg ccagtttagg atttcttttt ttctatacct tgaaatgatt 1560
ataaaataga ttttcatggg aattttaaaa actctatcca aaacattttt ggagcatttt 1620
aaagcccat acacagaagt atacgaaagc acacaaaaca ctccaagttt cagcagtttt 1680
agcgccacca ttaaccact ttgcttgtct catgaaaaat ctttgtttaa gtttgtacac 1740
aggtaacaaa aagttacttt aaaagatata taaagggctg taagctaatt gtggtgtcta 1800
gtaagttagc taatgagatg tgaggagttg gaactttgcg tgttttgcgt attttcatct 1860
gcattcagct tcttactctg ggtttgtact cgagtgttat ttctttacaa atgcccttgt 1920
aattaccact ctgaagtctg ctgactgtgt ctcttgaaca tacttaggat attctgcaca 1980
ttatggaaaa aggtaaattt tagaagtttc tgcttacta actgtagata tttatgactc 2040
tgcgagttag ctatttttat aaccacctgt ggtccattgt tcattttaat tcacatttct 2100
tatgaagtat ggtaacaggg agggagacac ctgatttagc agctcaattt gtactacttc 2160
agccaatctg tgaatgtaaa aactacactg ttgccttgct aggatccacc ctctataat 2220
atggaacaaa tatctgaatg aaatccacc taggagacgg agtcaaaacta aacttgtggt 2280
ttttcattta acttttgact acagcatggc cccatggcat ccacaccaag aggggtgtgt 2340
gatgaggtgc cgggtgtgcaa agggaacttt agtttttcca ctggttctta tctgctagcc 2400
ttttacatac atgtgtacta tatttgttta tagactgtag gtggatatat aatttaaaag 2460
cttgatttaa taaacattta accccctaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2520
aaaaaaaaa 2528
```

<210> 583

<211> 507

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (465)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (485)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (493)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (501)

<223> n equals a,t,g, or c

<400> 583

```
ggcacgagct cctgccttag cctcccagag tactgggatt acaggctctt tctttttaaa 60
cataaaagtt ttaaatgggt attaaactctg tactctgccc tagattgttt tagcttctgt 120
tctgtaatca tgagtttggg tggagatatt ctccatagat gatcttctac tgaaatgcct 180
aaagaagtca caggctgggt tctgttttat tcagggattt ttttaaaaag tcaatcagaa 240
aagggatact ggagcttctt catgtatgta acagcatatt aaactggaga cagtgatgaa 300
tcagctacaa aggtaatat gtattaaaat catgtttaag atagctgctt ttatgtgtat 360
tttatattgc atgcttttgt aaaaacatgc tgggtgatga aagattagtt ttagagagaa 420
aatgttcac tggtcagagg atgcatttct tccattaatt ctggnaaaaa ckttttttcc 480
ctttnggggg ggnaaaaaaa naaaaaa 507
```

<210> 584

<211> 1931

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1871)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1899)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1907)

<223> n equals a,t,g, or c

<400> 584

```
gntagaantg ggggttttcc nccattgggg gttcagcwcg mpgaacycct gacctcmggt 60
gatccacctg ccttgccctc ccaaagtgtc aggtattacag gtgtgrgcca ccacaccgg 120
ccccagarta atggtttctt gactttctgt agcccttggt ccttagtctg ctgtgatatt 180
tatgttgacc ttatcattt tctattctga acccctctta gcatttaatg tgaaatctaa 240
gaaattagaa gtagaatggc ttttattgtt ttgacacctt tgaaattatt attaataatt 300
tttccagagc aaaaaagcaa acacgctcaa taagactaaa caaaacaaaa tataaatgta 360
catcatttaa tgtcccagtg gctctattct acctgtaaga aaatgataca aaaccacct 420
agatattttg aagcctgaca aatcagcttc atggaaaaag gtaaaaaatg cttttttcaa 480
ccgaaagggc agatccaata gaagaccgc tccttaata aacataaaat gtaaaaagtt 540
ggaaaattaa gagtaatgtt ccatctggaa actgaacttt tgccttgaa cttgtgttg 600
caccaagcct catacacagt gagctcaata actgttggga caaaggaagg aaggacaaaa 660
tgtgtaactt cccagcatct gggagatgct gtctcttgcc tctactgagt ttccttttct 720
ttgtctcat gtcattccct gagaacaatg aattctggga caggctaaac atcatgatga 780
agtctcttaa acagactttc ttagtggaat tccatttaga tctgggtgtg ctctatgggg 840
agtgtgacg tcaaagagca aatgtctata aggggccctt ttaaaatgaa cttttctctc 900
attgagcaag ctgggattct ctaatgtaga aatcaagcca tctttataat ttcacttcag 960
atgtttatgt ttttgtttt tttgtctcca atgatggtaa aaataaaaac tacgcattac 1020
ttaaaggagt ttccttcaca tgtaaact gtttaggaagt ctggattaag ttgaaagtcc 1080
tgttttaact tttttctct catataccaa acactctgta tttctcttaa agaagccctt 1140
taagagaaag ccctaatttt atatctgaca gtaaagtgtg ctgcaagtgt atgagtcaa 1200
acacatccct tgttttctgt ccctagggga aaagtcagt agttttagct tggctccagt 1260
gttaatatata tattcagtag cagccttaga agagtgtct aagacttgaa cctggagcaa 1320
ttttatagca cagaatccta cgaagatagg actgtgaaca tttgttttct ttttcgtgtg 1380
tgtcaaaacta actgggtttt gctttacc aaatgtcc tcggcagagt aaatttttaa 1440
cgtgaaaatt atagatcttg atattgaatc catcagtgt tcaagagata cacctatttg 1500
cctaaaacaa cctaagatgt attggttatg gaatcatgt ttggatagg tcttaagacc 1560
tgtttcctca aatcttgaca cagttttcaa ggggtggctt ttgacttgca cgggtgggca 1620
gataatccag atttacctaa gattgggtaa aaaagtcac tgtgactttg ctggcagggc 1680
atgtgtctaa tggagtacag gatctaaaag ggttttctta gaaagggcaa tattgtccaa 1740
tgaagtaagc araaggactc tgggttagaa rcactctgcac aaaaactggg gaaaactact 1800
ctccctgtc tgcaactgga ttggtgatt caagctaaac atgggggaaa cagttttaac 1860
aacagggaat ncttcagtc ctgtttttt aaaaaacnt taaactnttg ttctttaatt 1920
```

cccaagtccc c

1931

<210> 585

<211> 1020

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1006)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1018)

<223> n equals a,t,g, or c

<400> 585

```
tgcgtcctcct ggcccgtccc tctcatccct cccattctcc atttcccttc cgttccctcc 60
ctgtcagggc gtaattgagt caaaggcagg atcaggttcc cgccttcca gtccaaaaat 120
cccgccaaga gagccccaga gcagaggaaa atccaaagtg gagagagggg aagaaagaga 180
ccagtgagtc atccgtccag aaggcgggga gagcagcagc ggccaagca ggagctgcag 240
cgagccgggt acctggactc agcggtagca acctcgcccc ttgcaacaaa ggcagactga 300
gcgcccagaga ggacgtttcc aactcaaaaa tgcaggctca acagtaccag cagcagcgtc 360
gaaaatttgc agctgccttc ttggcattca ttttcatact ggcagctgtg gatactgtg 420
aagcagggaa gaaagagaaa ccagaaaaaa aagtgaagaa gtctgactgt ggagaatggc 480
agtggagtgt gtgtgtgccc accagtggag actgtgggct gggcacacgg gagggcactc 540
ggactggagc tgagtgaag caaacatga agaccagag atgtaagatc ccctgcaact 600
ggaagaagca atttggcgcg gagtgcaa ataccagttcca ggcctgggga gaatgtgacc 660
tgaacacagc cctgaagacc agaactggaa gtctgaagcg agccctgcac aatgccgaat 720
gccagaagac tgtcaccatc tccaagccct gtggc aaact gaccaagccc aaacctcaag 780
cagaatctaa gaagaagaaa aaggaaggca agaaacagga gaagatgctg gattaaaaga 840
tgtcacctgt ggaacataaa aaggacatca gcaaacagga tcagttaact attgcattta 900
tatgtaccgt aggctttgta ttcaaaaatt atctatagct aagtacacaa taagcaaaaa 960
caaaaaaaaa aaaaaaaaaa ctcgagggggg ggtcccgtac ccaatngccc tctcatgnat 1020
```

<210> 586

<211> 767

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (617)

<223> n equals a,t,g, or c

<400> 586

```
attcggcacg wgtcctcttc cgtcagtgcg gtttcgcctt tatggtggtg gagtctgccc 60
aggctgtgga ccgcaaataa ccctgtacaa agaggaatgg agattgcctc tatccaccta 120
gattcataag ctggcctgag gtgatcttgg catcaaggaa gggatgcaca tcatcacacc 180
atcagcttca gagaatggca gccatttatt tgtcccgtgg gtttttttcc agggaaccaa 240
```

tctgcccttt tgaagaaaag acaaaggtag aaaggatggt ggaggactac ctggcaagtg 300
gttatcaggt aagcagaaaa cgtactgttg ttaaaaaatga yatgctttca tccaataggt 360
agacagawtt ctttctagac agactcatct tcagagtttt cttagagcaa atgaagcctt 420
actcaaggac tgagtcccca gatgaatttc cccagggaaat gaagtctcct atacataaar 480
tgttaacttg aaaatcagtc cagtagctca gtaattacta ctttaagcttg accttcattg 540
tgccaactgc atctttctta cattgctggg tgcrgtgacr gatgataaag cwgatgaaag 600
tgtcctttta tcaaatnatt cacttatcag catttatcag gtatctgcag tgtgctgagg 660
agtgtgckgc atagacacca atgggacagg aagagctcct armctgggtg tgcctgagatm 720
aagygtaaagc agtgtgcagt ggstcatgcc tgtaattccc tctgtgcc 767

<210> 587

<211> 847

<212> DNA

<213> Homo sapiens

<400> 587

ccttcttcat tgatcataac acaaagacta caacctggga agatccacgt ttgaaatttc 60
cagtacatat gcggtcaaaag acatctttta accccaatga ccttggcccc ctccctcctg 120
gctgggaaga aagaattcac ttggatggcc gaacgtttta tattgatcat aatagcaaaa 180
ttactcagtg ggaagaccca agactgcaga acccagctat tactgggtccg gctgtccctt 240
actccagaga atttaagcag aaatatgact acttcaggaa gaaattaaag aaacctgctg 300
atatcccaaa taggtttgaa atgaaacttc acagaaataa catatttgaa gagtcctatc 360
ggagaattat gtccgtgaaa agaccagatg tcctaaaagc tagactgtgg attgagtttg 420
aatcagagaa aggtcttgac tatgggggtg tggccagaga atggttcttc ttactgtcca 480
aagagatggt caaccctac tacggcctct ttgagtactc tgccacggac aactacaccc 540
ttcagatcaa ccctaattca ggcctctgta atgaggatca tttgtcctac ttcactttta 600
ttggaagagt tgcgtgtctg gccgtatttc atgggaagct cttagatggt ttcttcatta 660
gaccatttta caagatgatg ttgggaaagc agataaccct gaatgacatg gaatctgtgg 720
atagtgaata ttacaactct ttgaaatgga tcctggagaa tgaccctact gagctggacc 780
tcatgttctg catagacgaa gaaaactttg gacagacgtc gaccggccgc taatttagta 840
gtagtag 847

<210> 588

<211> 2158

<212> DNA

<213> Homo sapiens

<400> 588

ggctggccgc tccagcctcc cggcccgcctt gctggctgcc cagctgctag gacagtttgc 60
agagcagtgg cgtgcggagc ggcggcggac caccctccagg ggctaagtga tggatcttgt 120
actccgtggt gcagattact atttttttac accatacgtg tatccagcca catggccaga 180
agatgacatc ttccgacaag ctattagtct tctgattgta acaaatgttg gtgcttacat 240
cctttatttc tttctgtgcaa cactgagcta ttattttgtc ttcgatcatg cattaatgaa 300
acatccacaa ttttttaaaga atcaagtccg tcgagagatt aagtttactg tccaggcatt 360
gccatggata agtattctta ctgttgact gttcttgctg gagataagag gttacagcaa 420
attacatgat gacctaggag agtttccata tggattgttt gaacttgctg ttagtataat 480
atctttcctc tttttcactg acatgttcat ctactggatt cacagaggcc ttcacatag 540
actggtatar aagcgcctac ataaacctca ccatatttgg aagattccta ctccatttgc 600
aagtcatgct tttcacccca ttgatggctt tcttcagagt ctaccttacc atatataccc 660
ttttatcttt ccattacaca aggtgggtta tttaagtctg tacatcttgg ttaatatctg 720
gacaatttcc attcatgacg gtgattttcg tgtcccccaa atcttacagc catttattaa 780

tggtcagct catcatcacg accaccatat gttctttgac tataattatg gacaatattt 840
cactttgtgg gataggattg gcggctcatt caaaaatcct tcatccttg aggggaagg 900
accgctcagt tatgtgaagg agatgacaga gggaaagcgc acagccattc aggaaatggc 960
tgtaagaatg aaaaattatt caatggagag tttacaaaga ctgaatagat tattgccag 1020
ttattcttaa gtaaggacaa agaaggaaat atcatcgat ttcttttttt taataaggaa 1080
aaaataatct ccatacagtc aagatacata gtaaatggta tcatttgga atcagcatcg 1140
tgggcactgc tgaggaatga tcctagtggg aggtcagaag aagatgctgt gaacaccagg 1200
actttaatct tatgcttaaa atgccagatg ttgttcgggg gacaacttgt atctttctag 1260
cagcagatct gtagtttgta tagcctcaac aacaatttta aataagatgg agaataaatt 1320
attgagggga ctaggtata tgcatttgcc ttcattccacc catgtttatt aagaatcatt 1380
gtgcttaata ataccaagac taagcaccat aaccaagaaa tactaatgta aagattgttt 1440
cttgtttcag gaatgggttaa ttcttcaacg ttggtatgat aatgataact tgttttgact 1500
tgaataaagt actacatcag tgtggaaaaa aattctgata cattagcagc tatgtaaatg 1560
acctaattga tagcaggtgt aataagacta tcgtcttctt acacatagga ggctcattct 1620
ctggacacac tatcacctat tacattttac tgattaacaa ataaattgga atttaaaaaat 1680
atcgatatca ccattgattt atccagatct gggattatgt agctaaacat tgtgatgatt 1740
attatttaaa accattattt aataagagta aaaatatgtg aatctggata tatttaaaaa 1800
aagaaatttg atgccagat aatatattag gcactactga ttttttagtt aaattgatgc 1860
actacacttt tgatgtttga agttacaaac ctgtaatttt tttgtaaagg aaataattgc 1920
caaataccta ggccattgc tgacgattag ttctaaaatc ttattcctcc tcttctcccc 1980
tcacttttcc ctacttctc tgcaaaaaga tttacaaat acattcataa ggaaatgtgt 2040
gttgtaacaa atatatgca aaaacatagt ttgtaaaggc attctataag ctatttatgt 2100
aaaatcaata aaagtgtatc ataattaaaa aaaaaaaaaa aaaaaaaaag tcgacgcg 2158

<210> 589

<211> 2299

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (342)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 589

gggcacgagc tgctgtgctg ggattatatt ctgcaactag acaaaaaacc cacaaaactc 60
cacatggttt gttctcaagc aactggaata tggaaaggct tgaaggaata cttacacttt 120
ttgatggaag gtaatgacct tagttcttca gtatttatta gaactccatc cggcacaaac 180
tgtcactgca tagtcgattc atgcgggtcc agaatgaggg aactggcaag agctcttggt 240
ggatcatcaa ccctgatggg gggaagagcg gaaaagcccc ccggcggcgg gctgtctcca 300
tggaacaatg caacaagtat accaagagcc gtggccgcgc ancaagaaga aggcagccct 360
gcagacagcc cccgaatcag ctgacgacag tccctcccag ctctccaagt gccctggcag 420
ccccacgtca cgcagcagtg atgagctgga tgcgtggacg gacttccgtt cacgcaccaa 480
ttctaacgcc agcacagtca gtggccgcct gtcgcccac atggcaagca cagagttgga 540
tgaagtccag gacgatgatg gcgctctctc gcccatgctc tacagcagct cagcsagcct 600
gtcaccttca gtaagcaagc cgtgcacggt ggaactgcc aaggctgactg atatggcagg 660

```

caccatgaat ctgaatgatg ggctgactga aaacctcatg gacgacctgc tggataacat 720
cacgctcccg ccatcccgagc catcgcccac tgggggactc atgcagcgga gntctagctw 780
cccgatatacc accaagggct cgggcctgrg ctccccaacc agctccttta acagcacggt 840
gttyggacct tcatctctga actccctacg ccagtcttcc catgcagacc atccaagaga 900
acaagccagc taccttctct tccatgtcac actatggtaa ccagacactc caggacctgc 960
tcacttcgga ctcaacttagc cacagcgatg tcatgatgac acagtccggac cccttgatgt 1020
ctcaggccag caccgctgtg tctgcccaga attcccgcg gaacgtgatg cttcgcaatg 1080
atccgatgat gtccttttget gccagcgcta accagggaag tttgggtcaat cagaacttgc 1140
tccaccacca gcaccaaacc cagggcgctc ttgggtggcag ccgtgccttg tcgaattctg 1200
tcagcaacat gggcttgagt gagtccagca gccttgggtc agccaaacac cagcagcagt 1260
ctcctgtcag ccagtctatg caaacctctc cggactctct ctcaggctcc tccttgact 1320
caactagtgc aaacctgccc gtcattgggccc atgagaagtt cccagcgac ttggacctgg 1380
acatgttcaa tgggagcttg gaatgtgaca tggagtccat tatccgtagt gaactcatgg 1440
atgctgatgg gttggatttt aactttgatt cctcatctc cacacagaat gttgttggtt 1500
tgaacgtggg gaacttctact ggtgctaagc aggcctcatc tcagagctgg gtgccaggct 1560
gaaggatcac tgaggaaggg gaagtgggca aagcagaccc tcaaactgac acaagaccta 1620
cagagaaaac cctttgccaa atctgtctc agcaagtggc cagtataacc gtttacagct 1680
taacaccttt gtgaatccca cgccattttc ctaaccagc agagactgtt aatggcccct 1740
taccctgggt gaagcactta cccttggaac agaactctaa aaagtatgca aaatcttcct 1800
tgtacagggt ggtgagccgc ctgccagtgg aggacagcac cctcagcac caccaccct 1860
cattcagagc acaccgtgag ccccgctcgg ccattctgtg gtgttttaaat attgcgatgg 1920
tttatgggac gttttaagtg ttgttcttgt gtttgttttc ctttgacttt ctgagttttt 1980
cacatgcatt aacttgcggt attttctgt taaaatgtta accgtccttc ccctagcaaa 2040
tttaaaaaca gaaagaaaat gttgtaccag ttaccattcc gggttcgagc atcacaagct 2100
tttgagcgca tggaactcca taaactaaca aattacataa actaaagggg gattttcttt 2160
cttcttttgt ttggtagaaa attatccttt tctaaaaact gracmatggc acaacctctg 2220
cggacaccga gaagctgatc cgcgagaaaag acgaagagct gcgccgcatg caagagatgc 2280
tggaagaagat gcaggccca 2299

```

<210> 590

<211> 2180

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1353)

<223> n equals a,t,g, or c

<400> 590

```

gtgcaaagaa ggccaagcct gccatgccac aagattcagt cccaagtcca agatccctgc 60
aaggaaagag caccaccctc ttcagccgcc acaccaaggc cattgtgtgg ggcagtcaga 120
cccgggccgt gcaaggcatg ctggactttg actatgtctg ctcccgagac gagccctcag 180
tggtgcccat ggtctaccct ttcaactggg accacaagca gaagttttac tgggggcaca 240
aagagatcct gatccctgtc ttcaagaaca tggtgatgc catgaggaag caccggagg 300
tagatgtgct catcaacttt gcctctctcc gctctgccta tgacagcacc atggagacca 360
tgaactatgc ccagatccgg accatcgcca tcatagctga aggcattccct gagggcctca 420
cgagaaagct gatcaagaag gcggaccaga agggagtgc catcatcgga cctgccactg 480
ttggaggcat caagcctggg tgctttaaga ttggcaacac aggtgggatg ctggacaaca 540
tcctggcctc caaactgtac cggccaggca gcgtggccta tgtctcacgt tccggaggca 600
tgtccaacga gctcaacaat atcatctctc ggaccacgga tggcgtctat gagggcgtgg 660

```

ccattggtgg ggacaggtag ccgggctcca cattcatgga tcatgtgtta cgctatcagg 720
acactccagg agtcaaaatg attgtggttc ttggagagat tgggggact gaggaatata 780
agatttgccg gggcatcaag gagggccgcc tactaagcc catcgtctgc tgggtgcatcg 840
ggacgtgtgc caccatgtct cctctgaggt ccagtttggc catgctggag cttgtgcca 900
ccaggcttct gaaactgcag tagccaagaa ccaggctttg aaggaagcag gagtgtttgt 960
gccccggagc tttgatgagc ttggagagat catccagtct gtatacgaag atctcgtggc 1020
caatggagtc attgtacctg ccaggaggt gccgccccca accgtgcca tggactactc 1080
ctgggccagg gagcttggtt tgatccgcaa acctgcctcg ttcattgacca gcatctgcga 1140
tgagcgagga caggagctca tctacgggg catgcccac actgaggtct tcaaggaaga 1200
gatgggcatt ggcggggtcc tcggcctcct ctggttccag aaaaggttgc ctaagtactc 1260
ttgccagttc attgagatgt gtctgatggt gacagctgat cacgggccag ccgtctctgg 1320
agcccacaac accatcattt gtgcgcgast gngaaagac ctggtctcca gcctcacctc 1380
ggggtgctc accatcgggg atcggtttgg ggggtccttg gatgcagcag ccaagatgtt 1440
cagtaaagcc tttgacagtg gcattatccc catggagttt gtgaacaaga tgaagaagga 1500
aggaagctg atcatgggca ttggtcaccg agtgaagtcg ataaacaacc cagacatgcg 1560
agtgcagatc ctcaaagatt acgtcaggca gcacttccct gccactcctc tgctcgatta 1620
tgactcgaa gtagagaaga ttaccacctc gaagaagcca aatcttatcc tgaatgtaga 1680
tggtctcatc ggagtcgcat ttgtagacat gcttagaaac tgtgggtcct ttactcggga 1740
ggaagctgat gaatatattg acattggagc cctcaatggc atctttgtgc tgggaaggag 1800
tatggggttc attggacact atcttgatca gaagaggctg aagcaggggc tgtatcgtca 1860
tccgtgggat gatatttcat atgttcttcc ggaacacatg agcatgtaac agagccagga 1920
accctactgc agtaaaactga agacaagaac tcttccccca agaaaaagtg tacagacagc 1980
tggcagtgga gcctgcttta ttagcaggg gcctggaatg taaacagcca ctgggggtaca 2040
ggcaccgaag accaacaatcc acaggctaac accccttcag tccacacaaa gaagcttcat 2100
atttttttta taagcataga aataaaaacc aagccaawaa aaaaaaaaaa aaaaaaaaaa 2160
aaaaaaaaa aaaaaaaaaa 2180

<210> 591

<211> 1193

<212> DNA

<213> Homo sapiens

<400> 591

acagtgttag tgctagtga gtagacctca ctgtgtacaa cactgtctct gaaggaactc 60
actttctaga gacaatagag actccaagac ctggaaaact cttccccaaa gatgtaagca 120
gctccactcc acccagtgct acatcaaaga gccgggtgag ccggctggct ggtaggaaaa 180
caaatgaatc tgtgagtgag ccccgaaaag gctttatgta ttccagaaac acaaatgaaa 240
atcctcagga gtgtttcaat gcatcaaagc tactgacatc tcatggcatg ggcattccag 300
ttccgctgaa tgcaacagag ttcaactatc tctgtccagc catcatcaac caaattgatg 360
ctagatcttg tctgattcat acaagtgaag agaaggctga aatccctcca aagacctatt 420
cattacaaat agcctgggtt ggtgggtttta tagccatttc catcatcagt ttctgtctc 480
tgctgggggt tatcttagtg cctctcatga atcgggtgtt tttcaaat tctctgatt 540
yccytgtggc actggcgggt gggactttga gtgggtgatg ttttttacac cttcttccac 600
attctcatgc aagtcaccac catagtcata gccatgaaga accagcaatg gaaatgaaaa 660
gaggaccact tttcagtcac ctgtcttctc aaaacataga agaaagtgc tattttgatt 720
ccacgtgga ggttctaaca gctctaggag gcctgtattt catgtttctt gttgaacatg 780
tcctcacatt gatcaaaaca tttaaagata agaagaaaaa gaatcagaag aaacctgaaa 840
atgatgatga tgtggagatt aagaagcagt tgtccaagta tgaatctcaa ctttcaacaa 900
atgaggagaa agtagataga gatgatcgaa ctgaaggcta tttacgagca gactcacaag 960
agccctccca ctttgattct cagcagcctg cagtcttgga agaagaagag gtcattgatg 1020
ctcatgctca tccacaggaa gtctacaatg aatatgtacc cagagggtgc aagawtaaat 1080

gccattcaca tttccacgat acactcggcc agtcagacga tctcattcac caccatcatg 1140
actttttcaa aaaaaaaaaa aaaaaaaaaa aaataaaaaa aaaacaaaaa aaa 1193

<210> 592

<211> 2002

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1914)

<223> n equals a,t,g, or c

<400> 592

gtatggcatt tcattttgtt cttgtgttgt tggctatgca tcttagaggg aaaaaagtta 60
cttaagcaga cttctcagtt ttttttcctc ttctccaatt atcctgtagg aaattcacag 120
tatggccaac agcaagatgc ataccaggga ccacctccac aacagggata tccaccccag 180
cagcagcagt acccagggca gcaaggttac ccaggacagc agcagggcta cggtccttca 240
cagggtgggc caggctccta gtatcctaac taccacacag gacaagggtca gcagtatgga 300
ggatatagac caacacagcc tggaccacca cagccacccc agcagaggcc ttatggatat 360
gaccagggac agtatggaaa ttaccagcag tgaaaaagta cttacattcc agtagccagt 420
atctatttag agccatattg tcacctcagc actgtggaca cctccctgtg aagagatcct 480
tccattccat ctagtttttg gaaaaacctt gtggataagt ggctgtttca tcagtaagca 540
gcctttgtgg tttagtataa aaaggcttta gtagctcaaa aatactcttg atttcacatt 600
tctactctag atggcaacat tggacagaaa atgcaatgac ataaccaatt tgtaatgatt 660
ttggaactgt gtttcaaatg gactgttaca gactgaaagg tgtgaacagc tttgtatggt 720
tatgaagggt aagggaattt aatacttttc cacagatttt tttgtaaggg gaagagggaa 780
atgtacactt tttacagcag caatatattg tatattatgt ttatttcatg tggatgaatat 840
gcaaggcggc acactacgca ctggacagca tcagaaatcc tctgttaatg tggactggag 900
catggtagat gcttgattgt tttggtctca aaatgggtgt ctataaagat aaaggtgagg 960
ggaagacaaa gcacaccata tgtccactgt tctgttctca tagaggaaat tcaaatccct 1020
tttatctatt agataatcaa gggcactgtg atacagtttt gagtaaaaag acatttttta 1080
aaagccttcc agttttgtgg attaaacctt tttataaaga tcatttataa tactgtttta 1140
aaatgtgagg caataagaat tactttgtgt tggatctgag gaggttttg taaaacagtt 1200
tcatctaaat gaaagtggta atcctcttct aaaatagcaa taactgaaaa tgaaagtgtt 1260
aattttacct tgtttgagtt atcagggaac ttagtaagta atatcaaagc attttataaa 1320
tgatatcaaa gaagagtcaa cattgatcca gtcattttat tttgtaatat tgagggataa 1380
ttggttatta aactgaatag ttcaggagac tttacaaacc tttgtttcaa ctttcttata 1440
tggaataaat atcatttata aagggacact tttatgtttt tccctttttt atgttggttg 1500
atataacaca aagagatatt taggaaaatg cttattgatg aggtttattc tatctgtttt 1560
taaagcaccg aggttgcatc cttagataacc ttgtttatta gcatggcata ttttaatcat 1620
tatttgagac tgcctgtgct ctgattatatt tagctaaatt caggagagatt gcgtggggca 1680
ggaaagcatg cattgaaaaa tttctaacca cggttattta agcataatct gaaaacatct 1740
agcccaaagg taagtgtcta tttcatcac agttgcctat gccagggaa taagatgtat 1800
tctttataat tgaattgggt tttccacgt ctaactggga acaaaacaga aggggcgtca 1860
taaatttgaa taagcagaac atactgttct caacatactg taatcaaaaag ggnaattttc 1920
agtgggtctc tgtgtgtgta tgagagagag agtgtgtgtt tgtgtgtttc aaggtcagaa 1980
cagggtttttt ggttttgggt tt 2002

<210> 593

<211> 1014

<212> DNA

<213> Homo sapiens

<400> 593

```
acctgcagtg atccaccgcg ctcggcctcc caaagtgctg ggtcaactat gttcttgagt 60
aagaactcct gatgcctgat tggtatgttt atgaacaaac aagggtgaagg gttcagtata 120
agttgggaaa tcctagagca accatatctg ttactttcca tcctggttat atttcttaat 180
tagactgcga gttctgaatg aagtcctttt taaatagagc agttaatgcc atttctgtct 240
ctgcagggtt cacaagtagt gtttctaaat gagctctata atctgaaacc ggttcatctt 300
tcttttgccc acaagattat gtgattgacc aatcaatttt ttgtggaaaa gccctagggg 360
ttgaatttaa aagatcttca gcaattcttc cagttccttt ttgcctcctc ttgggggttt 420
ggagtggctt ttagtatcct caggctgttk ccattctgct cctgctgtca attttcaagc 480
tyaccagtat catgtgaata aattggtaaa gattagagag tcctgaatca taagctctta 540
tgaggattct caattttcca gtacgttttt gagtattttc tcttgatta gttaagtctt 600
tatgatggct ctaagctcag ctttagacca tggagtaaaa gtggttacag caggcaggct 660
ggttgactag agagtctcac tttgtaaggc atttgtccaa cttccccttt ttcattagcc 720
tcaaggagaa aaggtaactg agcaaaaggg ttactgtact caaagcatcg aggcaagaa 780
gagacagaga aggagcaatc cagggttcag tgctgcatga gcctttcatt tgcgttttgt 840
aaagaatctt ttaggcaatt ttagatttgt ataatccttt agatgcctct gcataccgat 900
ttaaaatgca tcccgttgtt tttgtggcgt ttctgatcct ttcttttyta atgtgtccca 960
taaataaaca gttttattta aagtttaaaa aaaaaaaaaa aaagaaaaaa agaa 1014
```

<210> 594

<211> 333

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (242)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (292)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (328)

<223> n equals a,t,g, or c

<400> 594

```
ggagcgagtg caaggccgcc tgagcgcgcc cccacccgg yggcgggccag ggacccccga 60
ggcccccttc tgcttttgag cttctcctct gctccaacag acaccttcca ctctgaggtc 120
tcaccttcgc ctctgtgaa gtctccccgc agccctctcc acccagaggt ctccctatac 180
cgagaccac catccttcca tcctgaggac cgccccaacc ctcggagccc cccactcagt 240
angtctgaaa gggcttcatt tggaccgaaa caaccgggtt aaccttaca gncttctaag 300
gcttccttaa ggaaccttcc aaccaaancc ttc 333
```

<210> 595

<211> 1120
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (585)
<223> n equals a,t,g, or c

<400> 595
ctgccgccgc gccgccgccg cctcacaana tggcggcccn atagaggaga ccgcggccgc 60
ctccccggcc cattttgtgg gaggcgagag atctgtcaac atggaaaacc tctgctgagg 120
atgcatccga gtttggaac cccacttaag ggatggagcc tgggggatca cattaacgg 180
aaaatgccaa cgacttctac cacctctacg cgtttttagt ttttcatttt ctcgaaggaa 240
gcgccagaag cctgtggagt aattgtaact agagggagaa cggaaagctg aggtgactgc 300
tccggggact tggcgcggcg ccttggtggc tttggttgc cttccacgct cccggcagct 360
gaccagaatc tcttgagggg tctcctgggc cacctcggcc gcgccagtcg tgcagtgaga 420
cttctgtagt tttaaaatgc cacagtccac ggcccggctc gcaccgctcg cctgaatcgt 480
gggctttggg aaccttgag gctgctgctc caggaaactc cggtcggccg ggagccgggg 540
agcttcggtg ctgggagcgg gcggtattcg cggactccgg cggcnctggc gggtcgcggc 600
cgggatccsa gccggggatg acgatgctga tggagctgat ggggcaagag tgggaacgga 660
gaagtgcagc tttctgcasg tgcgcctcaa tcgtaagtt ccaactctcca tctctgccc 720
cgctactcct ggcatgtgga tcaccaagat acaatttctg gtcctgtctg ttcttattga 780
tgtcctttac agttaataaa tttgattgcc actaatcagt ctgtatctct tgcaaaaaaca 840
ccacatttag catccaagta gagtcagagt atgtttttta tgagattgta ctaaagtaac 900
cttctattac atttcttatt accatattgc atttcctata gtgggcagca tagagcaggt 960
ggatcctgac aaagtaatgt tagagatgtg ctgacagctt tacaatagat attctccaac 1020
taatttgaca agatataaaa taaaatgtag ttcgtagttt tcaagcatta atggaaagt 1080
ttcctattaa aaaattacca ataacagtgg aaaaaaaaaa 1120

<210> 596
<211> 532
<212> DNA
<213> Homo sapiens

<400> 596
cgcattcttt tcacttctct taatgctctg taaacattaa tgtattttata tatgtactta 60
gaattttaaa aaatcaattt tattgagtta taattaacat acagtaaaaa tgctcccatc 120
ttgagtaatt ccatgccttt tgacaagtgt tctgtaccca tgccacgacc accacaatcg 180
agagagaaca tcttcatcac tccagaaggc ctcctttgca gtgagtactc ctaggaggt 240
ccagcggccg gtgacattga tctgttttct gtcactgtag atgagatttg tctgttatat 300

acaatttttta aaaattaaat gatatgtatg gcttcttttg cttagcataa tgtttttgag 360
cttattcatt tgttgcataat atcaatactt tgcttctttt taccacctgt acttcattta 420
tggtacggtt gtttatccat gtgtttatcc ccaatggaca ttgggttggt tctgattttt 480
tggttattat tatgaataaa gttgctatga acattattgt ataaaaaaaa aa 532

<210> 597

<211> 1494

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1483)

<223> n equals a,t,g, or c

<400> 597

ggcacgagcc gccccgtggc gcccagatgc actgaagatg gcggctgctg taggacgggt 60
gctccgagcg tcggttcctc atgccatgca cctgctgtca cccagcatgc accctatttt 120
aagggtagag ccgttggtcaa tggagagttc aaagacctaa gccttgatga ctttaagggg 180
aaatatttgg tgcttttctt ctatcctttg gatttcacct ttgtgtgtcc tacagaaaatt 240
gttgctttta gtgacaaagc taacgaattt cacgatgtga actgtgaagt tgtcgcagtc 300
tcagtggatt cccactttag ccactctgcc tggataaata caccaagaaa gaatgggtgg 360
ttgggccaca tgaacatcgc actcttgta gacttaacta agcagatttc ccgagactac 420
ggtgtgctgt tagaagggtc tggctctgca ctaagaggtc tcttcataat tgaccccaat 480
ggagtcatca agcatttgag cgtcaacgat ctcccagtg gccaagcgt ggaagaaacc 540
ctccgcttgg tgaaggcgtt ccagtatgta gaaacacatg gagaagtctg cccagcgaac 600
tggacaccgg attctcctac gatcaagcca agtccagctg cttccaaaga gtactttcag 660
aaggtaaaac agtagatcac ccagtgtgat ctgcacctc tcaactgaga gaagaaccac 720
agttgaaacc tgcttttata attttcaaga tggttatttg tagaaggcaa ggaaccaatt 780
atgcttgat tcataagtat tactctaaat gttttgtttt tgtaattctg gctaagacct 840
tttaaacatg gttagtgtc agtacaagga atcstttatt ggtaacatct tgggtggctg 900
ctagctagtt tctacagaac ataatttgcc tctatagaag gctattctta gatcatgtct 960
caatggaaac actcttcttt cttagcctta cttgaatcct gcctataata aagtagagca 1020
acacacattg aaagcttctg atcaacgggc ctgaaatttt catcttgaat gtctttgtat 1080
taactgaat tttcttttaa gctaacaag atcataattt tcaatgatta gccgtgtaac 1140
tcctgcaatg aatgtttatg tgattgaagc aaatgtgaat cgtattattt taaaaagtg 1200
cagagtgact taactgatca tgcatgatcc ctcatccctg aaattgagtt tatgtagtca 1260
ttttacttat ttatttcatt agctaacttt gtctatgtat atttctagat attgattagt 1320
gtaatcgatt ataaaggata ttatcaaat ccagggttg cattttgaaa ttataattat 1380
tttctttgct gaagtattca ttgtaaaaca taaaaataa acatatttta aaacatttgc 1440
attttaccac caaaaaaaaa aaaaaaaaaa cctcgggggg ggncccggtc ccca 1494

<210> 598

<211> 2188

<212> DNA

<213> Homo sapiens

<400> 598

gtcggcttcc actccttcag gcgtcggcag ccactagtcg tggcgagagg ggcgggggtg 60
ccggggctgg cgctccactt ggcccccgct cccggccgc cccgccgccg sgccccccgg 120
atgaggggtat atattcggag ygagcgcggg acscgatgag tggccgcgcg gaaggagctg 180

gagacggctg tagctgcggt cgcgccgaga aaggtttaca ggtacatata ttacacccct 240
atctctacaa agcttggtta ttagagcatt atgaacatta atgacctcaa actcacgttg 300
tccaaagctg ggcaagagca cctactacgt ttctggaatg agcttgaaga agcccaacag 360
gtagaacctt atgcagagct ccaggccatg aactttgagg agctgaactt ctttttccaa 420
aaggccattg aaggttttta ccagctcttct caccaaaaga atgtggatgc acgaatggaa 480
cctgtgcctc gagaggtatt aggcagtgtc acaagggatc aagatcagct ccaggcctgg 540
gaaagtgaag gacttttcca gatttctcag aataaagtag cagttcttct tctagctggt 600
gggcagggga caagactcgg cggtgcatat cctaagggga tgtatgatgt tggtttgcca 660
tcccgtaaag cactttttca gattcaagca gagegtatcc tgaagctaca gcaggttgct 720
gaaaaatatt atggcaacaa atgcattatt ccatgggata taatgaccag tggcagaaca 780
atggaatcta caaaggagtt cttcaccaag cacaagtact ttggtttaaa aaaagagaat 840
gtaatctttt ttcagcaagg aatgtctccc gccatgagtt ttgatgggaa aattattttg 900
gaagagaaga acaaagtctc tatggctcca gatgggaatg gtggtcttta tcgggcactt 960
gcagcccaga atattgtgga ggatattggg caaaggaggca tttggagcat tcatgtctat 1020
tgtgttgaca acatattagt aaaagtggca gaccacgggt tcattggatt ttgcattcag 1080
aaaggagcag actgtggagc aaagggtgga gaaaaacga accctacaga accagttgga 1140
gtggtttgcc gagtggtggt agtttaccag gtggtagaat atagttagat ttccctggca 1200
acagctcaaa aacgaagctc agacggacga ctgctgttca atgcggggaa cattgccaac 1260
catttcttca ctgtaccatt tctgagagat gttgtcaatg tttatgaacc tcagttgcag 1320
caccatgtgg ctcaaaagaa gattccttat gtggataccc aaggacagtt aattaagcca 1380
gacaaaccca atggaataaa gatggaaaaa tttgtctttg acatcttcca gtttgcaaa 1440
aagtttgtgg tatatgaagt attgcgagaa gatgagtttt cccactaaa gaatgctgat 1500
agtcagaatg ggaaagacaa ccctactact gcaaggcatg ctttgatgtc ccttcatcat 1560
tgctgggtcc tcaatgcagg gggccatttc atagatgaaa atggctctcg ccttccagca 1620
attccccgca gtgctacaaa tgggaagtca gagaccatca cagctgatgt caatcacaa 1680
ttgaaggatg ccaatgatgt accaatccaa tgtgaaatct ctctcttctt ctctatgct 1740
ggagaaggat tagaaagtta tgtggcagat aaagaattcc atgcacctct aatcatcgat 1800
gagaatggag ttcagtagct ggtgaaaaat ggtatttgaa ccagatacca agttttgttt 1860
gccacgatag gaatagcttt tatttttgat agaccaactg tgaacctaca agacgtcttg 1920
gacaaactgc gtttaaatat ccacagggtt ttattttgct tgttgaactc tttagagctat 1980
tgcaaaactc ccaagatcca gatgactgaa ttccagatag catttttatg attcccaact 2040
cattgaagggt cttatttata taattttttc caagccaagg agaccattgg ccatccagga 2100
aatttcgtac agctgcaagt aaactgatgt tgaacatccw gctwtayttc agctggaagc 2160
atctgttttt gaagttgtac atagtaat 2188

<210> 599

<211> 1273

<212> DNA

<213> Homo sapiens

<400> 599

ataatacagt tctgagtatg tgtagaagac caggatgctg cttatttgat tctataataa 60
ctcacctatg acatgccaca catacatgta actgagctgg gttttgagta gttagttgga 120
gagtttttta attgagaagt ttaattcaga agtttggttt tggtgcctct gatttaacat 180
tttatatttc ttttgaaaaa tttccaacag agctcaaagt atacttttcc cacagcaatg 240
cacattgctg ctgcaataga agttcatgaa gtactgttac caggactaca gaagttacat 300
gatgctcttg atgcaaaatc caaagagttt gcacagatca tcaagattgg acgtactcat 360
actcaggatg ctgttccact tactcttggg caggaattta gtggttatgt tcaacaagta 420
aaatatgcaa tgacaagaat aaaagctgcc atgccaagaa tctatgagct cgcagctgga 480
ggcactgctg ttggtacagg tttaaatact agaattggct ttgcagaaaa ggttgctgca 540
aaagtggctg cacttacagg cttgcctttt gtcactgctc cgaataaatt tgaagctctg 600

gctgctcatg acgctctggt tgagctcagt ggagccatga acactactgc ctgcagtcctg 660
atgaagatag caaatgatat tcgatttttg ggttctggtc ctcggtcagg tctgggagaa 720
ttgatcttgc ctgaaaatga accaggaagc agtatcatgc caggcaagggt gaaccctact 780
cagtggtgaag caatgacatg ggttgcagcc caagtcatgg ggaacatgt tgctgtcact 840
gtcggaggca gcaatggaca ttttgagttg aatgttttca agccaatgat gattaaaaat 900
gtgttacact cagccaggct gctgggggat gcttcagttt cctttacaga aaactgcgtg 960
gtgggaatcc aggccaatac agaaaggatc aacaagctga tgaatgagtc tctaagtgtg 1020
gtgacagctc tcaatcctca tatagggtat gacaaggcag caaagattgc taagacagca 1080
cacaaaaatg gatcaacctt aaaggaaact gctatcgaac ttggctatct cacagcagag 1140
cagtttgacg aatgggtaaa acctaaggac atgctgggtc caaagtgatt tacataaatt 1200
tataatgaaa ataaacatgt ataaaattta aaaaaaaaaa aaaaaatcgg ggggggggccc 1260
ccgtacccat tgg 1273

<210> 600

<211> 1239

<212> DNA

<213> Homo sapiens

<400> 600

aattcggcac gagctgaagc cctctctctg gatgacacag actttgaggt gtagtgaaat 60
ctttgctgtt caccagatgt aatgttttag ttccttacia acaggggttg gggggggaag 120
ggcgtgcaaa aactaacatt gaaattttga aacagcagca gagtgagtggt atttttatatt 180
tcgttattgt tgggtggtta aaaaattccc cccatgtaat tattgtgaac accttgcttt 240
gtggtcactg taacatttgg ggggtgggac agggaggaaa agtaacaata gtccacatgt 300
ccctggcatc tgttcagagc agtgtgcaga atgtaatgct cttttgtaag aaacgtttta 360
tgatttttaa aataaaattta gtgaacctat ttttgggtgt catttttttt ttaagacagt 420
cattttaaaa tgggtggtga atttcccaac ccaccccaa actaaacact aagtttaatt 480
ttcagctcct ctgttggaca tataagtga tctcttggtg gacataggca aaataacttg 540
gcaaacttag ttctgggtgat ttcttgatgg tttggaagtc tattgctggg aagaaattcc 600
atcatacata ttcatgctta taataagctg gggatttttt gtttgttttt gcaaatgctt 660
gccccacttt ttcaacaatt ttctatgcta gttgtgaaga actaagggtg ggagcagtag 720
tacaagtga gtaattggtat gagtatatac cagaattctg attggcagca agttttatta 780
atcagaataa cacttggtta tggaaagtga taatgctgaa aaaattgatt atttttatta 840
gataatttct cacctataga cttaaactgt caatttgctc tagtgtctta ttagttaaac 900
tttgtaaaat atatatatac ttgtttttcc attgtatgca aattgaaaga aaaagatgta 960
ccatttctct gttgtatggt ggattatgta ggaaatgttt gtgtacaatt caaaaaaaaa 1020
aaagatgaaa aaagtccctg tggatgtttt gtgtagtatc ttggcatttg tattgatagt 1080
taaaattcac ttccaaataa ataaaacacc catgatgcta gatttgatgt gtgcccraat 1140
tgaacaaggg ttgattgaca cctgtaaaat ttgttgaaac gttcctctta aaaggaaata 1200
tagtaatctt atgtaaaaaa aaaaaaaaaa aactcgaga 1239

<210> 601

<211> 1286

<212> DNA

<213> Homo sapiens

<400> 601

aattcggcac gagtttgtat tttgagtaga gacaggggtt caccgtgttg gctaggatgg 60
tgtctatctc ttgaccttgt gatccaccgc cctcagcctc ccagagtgtg gggattacag 120
gtgagagcca ctgagcctgg ctgggttttca tgaatcttga tagacatcta taacgttatt 180
attttcagtg gtgtgcagca tttttgcttc atgagtagta cctagggtata gagatctgat 240

```
aacttgaatt cagaatatta agaaaatgaa gtaactgatt ttctaaaaaa aaaaaaaaaa 300
aaaatttcta cattataact cacagcattg ttccattgca ggttttgcaa tgtttggggg 360
taaagacagt agaaatatta ttcagtaaac aataatgtgt gaacttttaa gatggataat 420
agggcatgga ctgagtgcct ctatcttgaa atgtgcacag gtacacttac cttttttttt 480
ttttttttta agtttttccc attcaggaaa acaacattgt gatctgtact acaggaacca 540
aatgtcatgc gtcatacatg tgggtataaa gtacataaaa tatatctaac tattcataat 600
gtggggtggg taatactgtc tgtgaaataa tgtaagaagc ttttactta aaaaaaatgc 660
attactttca cttaacacta gacaccaggc cgaataatgt caagggtata gtacttattt 720
caacaattct tagagatgct agctagtgtt gaagctaaaa atagctttat ttatgctgaa 780
ttgtgatttt tttatgccaa atttttttta gttctaatac ttgatgatag cttggaaata 840
aataattatg ccattggcatt tgacagtcca ttattcctat aagaattaaa ttgagttag 900
agagaatggt ggtgttgagc tgattattaa cagttactga aatcaaatat ttatttgta 960
cattattcca tttgtatttt aggtttcctt ttacattctt tttatatgca ttctgacatt 1020
acatattttt taagactatg gaaataatgt aaagatttaa gctctggtgg atgattatct 1080
gctaagtaag tctgaaaatg taatatattg ataatactgt aatataacct tcacacaaat 1140
gcttttctaa tgttttaacc ttgagtattg cagttgctgc tttgtacaga gggtactgca 1200
ataaaggagc tggattcatt aaactaaaaa aaaaaaaaaa aaaaaaaaaa aaaagtcgac 1260
cggccggtta tttagtagta gtaggc 1286
```

<210> 602

<211> 404

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (399)

<223> n equals a,t,g, or c

<400> 602

```
tgcacccacg cgtccgccca cgcgtccgcc cacgcgtccg ggaagcccat acataacagt 60
ggaggtgttt tgtctaacca tcaaatgttt tgagactttt ttttaaacad ttctgagttc 120
gaaggttaata ctgacagatt tcttccctct tccctcccca tcaccacact cagtataac 180
acattactga tagaggaagt cattagaatc atttttaagt ttcagatata ggagacttca 240
tgcaattttg agataagact aattattggg ggttttcctt ggattttttt ttttaataact 300
ggggggtatt ttatcagctt gcctattaaa ggactatggt aagtatagaa tcttaatggt 360
tgccagttag taattctttt tttttttttt ttactgtana caca 404
```

<210> 603

<211> 1168

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1121)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1122)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1133)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1153)

<223> n equals a,t,g, or c

<400> 603

```
ggcgccgcg tggctgcgt ctccggcgtt tgaattgcgc ttccgccatc tttccagcct 60
cagtcggacg ggcgcggaga cgcttctgga aggaacgccg cgatggctgc gcagggagag 120
ccccaggtcc agttcaaact tgtattggtt ggtgatggtg gtactggaaa aacgaccttc 180
gtgaaacgtc atttgactgg tgaatttgag aagaagtatg tagccacctt ggggtgtgag 240
gttcatcccc tagtgttcca caccaacaga ggacctatta agttcaatgt atgggacaca 300
gccggccagg agaaattcgg tggactgaga gatggctatt atatccaagc ccagtgtgcc 360
atcataatgt ttgatgtaac atcgagagtt acttacaaga atgtgcctaa ctggcataga 420
gatctggtac gagtgtgtga aaacatcccc atttgttgtt gtggcaacaa agtggatatt 480
aaggacagga aagtgaaggc gaaatccatt gtcttccacc gaaagaagaa tcttcagtag 540
tacgacattt ctgcaaaaag taactacaac tttgaaaagc ccttcctctg gcttgctagg 600
aagctcattg gagaccctaa cttggaattt gttgccatgc ctgctctcgc cccaccagaa 660
gttgtcatgg acccagcttt ggcagcacag tatgagcacg acttagaggt tgctcagaca 720
actgctctcc cggatgagga tgatgacctg tgagaatgaa gctggagccc agcgtcagaa 780
gtctagtttt ataggcagct gtcctgtgat gtcagcgggtg cagcgtgtgt gccacctcat 840
tattatctag ctaagcggaa catgtgcttc atctgtggga tgctgaagga gatgagtggg 900
cttcggagtg aatgtggcag tttaaaaaat aacttcattg tttggacctg catatttagc 960
tgttttggaa cgcagttgat tccttgagtt tcatatataa gactgctgca gtcacatcac 1020
aatattcagt ggtgaaatct tgtttggtac tgtcattccc attccttttc gtttagaatc 1080
agaataaagt tgtatttcaa atatctaaaa aaaaaaaaam nngggggggs cgnccattcc 1140
ccaaaggggg gtnaaaaccc gggggggtt                                     1168
```

<210> 604

<211> 458

<212> DNA

<213> Homo sapiens

<400> 604

```
ggcgcccggtg gcgcgggtgg cggtgctgtg gctggctgtg gggacggagg cgggtgaagtg 60
ccatcttcgg ctaggtcgtc acaggctccg gctcatggca tcaagtggca tccatcataa 120
gatcgttaac tgaagacaat atgcaaaatt ctcacatgga tgaatacaga aattctagta 180
atggcagcac aggcaacagt tcagaggtag tggtagaaca tcctactgat ttcagtactg 240
agattatgaa cgttacagaa atggaacagt cacctgatga ctctcccaat gtgaatgcat 300
ctacagaaga aactgaaatg gcaagtgtctg tggaccttcc agtgacgctg acagaaacag 360
aagcaatttc cctccagaat atgaaaaatt ttggaaaact gtagaaaata atcctcaggt 420
tttaaaggct gggtatatat gcctcaatat gtagaaca                                     458
```

<210> 605

<211> 911

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (897)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (904)

<223> n equals a,t,g, or c

<400> 605

```
cgacccacgc gtccggaccc acgcgtccgg ggaaaatggc gctggccatg ctggtcttgg 60
tggtttcgcg gtggtctgcg gcccggggag tgcttcgaaa ctactgggag cgactgctac 120
ggaagcttcc gcagagccgg ccgggctttc ccagtcctcc gtggggacca gcattagcag 180
tacagggccc agccatgttt acagagccag caaatgatac cagtgggaagt aaagagaatt 240
ccagcctttt ggacagtatc ttttggatgg cagctcccaa aaatagacgc accattgaag 300
ttaaccggtg taggagaaga aatccgcaga agcttattaa agttaagaac aacatagacg 360
tttgtcctga atgtggtcac ctgaaacaga aacatgtcct ttgtgcctac tgctatgaaa 420
aggtgtgcaa ggagactgca gaaatcagac gacagatagg gaagcaagaa gggggccctt 480
ttaaggctcc caccatagag actgtggtgc tgtacacagg agagacaccg tctgaacaag 540
atcagggcaa gaggatcatt gaacgagaca gaaagcgacc atcctggttc acccagaatt 600
gacaccaaag atgttaaaag gataacttca cagtaaataca tttctcctga aatagaggaa 660
gattctttac gttgttgtgc ttgtttttaa atcatcagta tagtttaaca cattctttct 720
aagcagtttt gtgtgggata atttgaagaa tatattatga gtaaaactcg aaaattttgt 780
ttatccaaag gctcaatgga ttatgtttct attatataca aggttttaag taaacataaa 840
atttcagaa caaaaataaa aaatttaaaa ttcatagcaa aaaaaaaaaa aaggggnggc 900
cgcncctaggg g                                     911
```

<210> 606

<211> 738

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (730)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (737)

<223> n equals a,t,g, or c

<400> 606

```
cccacgcgtc cgccacgcg tccgcgcaga tggcggcggc gcacggcgcc tgagcggggc 60
ggggccatga gcgccgccc gcccagttc agcattgatg atgccttcga gctgtccctg 120
gaggacgggg gccctgggccc cgagtcacgc ggggtcgcgc gctttgggccc gctgcacttc 180
gagcgtcggg cccggttcga ggtgggtgac gaggacaagc agtcccggct gcgctaccag 240
```

```
aacctggaga acgatgagga tggagccag gcctctccgg agccggatgg gggagtcggc 300
accaggtttag ggccagggat tccagccgaa ctccaccgg ggcttccagt tcttctacct 360
gccctacttc gagaagtgat cgcggcgag cgtggacccc ttgcgcccac gggggcgccc 420
ctcttgccct gttccgttcc cctcatctca agggaagagg ccctccagga ccctcgaaac 480
cccagccctt agggagtgtg ctcaggaagt tcggggcatg caggcctggc cctgggaaaag 540
ccgcccgtcg cctgctctgt gccttaactt attctcgggc cgtgcggctg ctagggttgc 600
gttattttgt gctaataaaa gagtaattaa ttccaaaaaa aaaaaaaaaa aaaaaaaaaa 660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggcgg ccgtttttaa 720
ggatccaagn ttacgtnc 738
```

<210> 607

<211> 1348

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1328)

<223> n equals a,t,g, or c

<400> 607

```
tcgaccacg cgtccgccc cgcgtccggc ccggtgccaa gcgcagctag ctcagcaggc 60
ggcagcggcg gcctgagctt cagggcagcc agctccctcc cggctctcgcc ttccctcgcg 120
gtcagcatga aagccttcag tcccgtgagg tccgtagga aaaacagcct gtcggaccac 180
agcctgggca tctcccgag caaaacccct gtggacgacc cgatgagcct gctatacaac 240
atgaacgact gctactccaa gctcaaggag ctggtgccca gcatcccca gaacaagaag 300
gtgagcaaga tggaaatcct gcagcacgtc atcgactaca tcttgacct gcagatcgcc 360
ctggactcgc atcccactat tgtcagcctg catcaccaga gaccgggca gaaccaggcg 420
tccaggacgc cgtgaccac cctcaacacg gatatcagca tctgtcctt gcaggcttct 480
gaattccctt ctgagttaat gtcaaagac agcaaagcac tgtgtggctg aataagcggc 540
gttcatgatt tcttttattc tttgcacaac aacaacaaca acaaattcac ggaatctttt 600
aagtgtctgaa cttatttttc aaccatttca caaggaggac aagttgaatg gaccttttta 660
aaaagaaaaa aaaatggaa ggaaaactaa gaatgatcat ctcccagggt tgttctctta 720
cttgactgt gatattcgtt atttatgaaa aagactttta aatgcccttt ctgcagttgg 780
aaggttttct ttatatacta ttcccaccat ggggagcgaa aacgttaaaa tcacaaggaa 840
ttgcccaatc taagcagact ttgccttttt tcaaagggtg agcgtgaata ccagaaggat 900
ccagtattca gtcacttaaa tgaagtcttt tggtcagaaa ttaccttttt gacacaagcc 960
tactgaatgc tgtgtatata ttatatata aatatatcta tttgagtga accttgtgaa 1020
ctctttaatt agagttttct tgtatagtgg cagagatgtc tatttctgca ttcaaaagt 1080
taatgatgta cttattcatg ctaaaacttt tataaaagt tagttgtaaa cttaaccttt 1140
ttatacaaaa taaatcaagt gtgtttattg aatggtgatt gcctgcttta tttcagagga 1200
ccagtgtttt gatttttatt atgctatgtt ataactgaac ccaaataaat acaagttcaa 1260
atttatgtag actgtataag attataataa aacatgtctg aagtcaaaaa aaaaaaaaaa 1320
aaaaatttct cggccgacaa gggaattc 1348
```

<210> 608

<211> 722

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (690)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (703)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (718)
<223> n equals a,t,g, or c

<400> 608
ggcttaaattg tgattcttga tactgtttta agtatttagg ttgcaattaa ctttggcaaa 60
gtcagtcgac ataagccctg tggatatggc cttatgtaca ctgtaatgca gacagggtgct 120
tttcatcatt catgtaacat tctcacacag ttgaggrtat tcatctcctc accaattcca 180
gattgtraat gtacywtctt aaacaactct tgagggtcacc aaacagtagt tatttgactg 240
ttaatagggtg ctacttgctt gcaaggattt ggagatgtaa acatgaagaa aatatagtta 300
ctgcctgcaa agaattaaca tccgtctagt gggagaaaaca aacacacccc actcactaag 360
tatggaaaac tgattctggg aggaagcaga aatgtcccta gataacagca tgtattgcag 420
atacccaaat gtttattgtt ttctcagccc ttcaattttg cttttctctc tcaaagtcta 480
cagactcaat ttaaattctta cttttgattg ttgaaaaaag tctaatagat gtgaatacag 540
aatagacatt gagaggttat atatgtccaa aactcatctg tccagcagtc accgtcctct 600
tcagagtggc cacgttgggc agrtgggcac aggtgctggg gatgcccctc ckgggcaaaa 660
cgccccattt gtggcacttc cagatactan ttatttactt ttnaagagag agacaggntc 720
ac 722

<210> 609
<211> 330
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (315)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (321)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c

<400> 609
ggcagagtat ttacttgact aaatattact atataaacat tttcatatct tgccacttca 60

```
cctaacaata cagcacaagc agcttctcat ggcattaaga attgtttgta catgtaattt 120
tgaatggctg tatgctgttt catcttaaga atataccata attctaattt ttcataatta 180
taatagcact gtgacgaaca tccttcttaa caaaattctt tgtctgcacc tatggttatt 240
ttctaaggta grttattaga atttgaaatg ccttgcacaa gggacagtaa ctttttcacc 300
cttagttttc agggnggacc ngttgtctcn 330
```

<210> 610

<211> 1866

<212> DNA

<213> Homo sapiens

<400> 610

```
ggcctcccaa agtgttgaga ttacagggtg gagccaccat gtcgctgag agcagatatt 60
tgaaatgtca ctttgagttc tgagaaaaag taaaaagcca gaagacatac tagatatata 120
aatatattac tgcttaaaaa gatttcctaw aaagaaatgt atcmagtgtg tgaatcaaaag 180
tctgaaagaa agatgaagag ccaccagact tctaggtagg tttacatcca tcatgttcct 240
cttgactgcc tttgtttgtc gtttagtttt ttgctccact caagcctggt agaatcacca 300
tggaatacag ctccagtggg aaggccactg gagaagctga tgtgcacttt gagacccatg 360
aggatgctgt tgcagcgatg ctcaaggatc ggtcccacgt tcatcatagg tatattgaac 420
tgttcctgaa ttcattgtcca aaaggaaaat aagactctag gggctccaga taataagggg 480
gaagcaagaa gcatttcatt tgcacatctt tcttggactt gggatataca gttccagttt 540
attagcagca actgctaggg aaatgatatt ggtgttttgg gttaattgct tctaagaaaa 600
gtttcatagt ggactgttta gaagaagaaa tgaaagatcc agtttgggat tatgaaataa 660
accacaaatt aaaatttttg tttaaactgt ccaggatctg atttaaaaa atgggtctttg 720
ttttatatga ttaaatgggt tgttttcata gatgatattg tactcattgt aaagaccaca 780
tatttttatt cagcagtgtt ctttaaacgc tttcatttaa aaagtaactt ttttttttg 840
cctgtgaatt gagtgcctg atgtaaaact tctcatggag tgaacagtg atttatttta 900
accaaacatt caccaaaagca aagaacggtt tcagaccctt gaactgggtat ggtttggcag 960
aatagtttta aattttgctg tatttgatta cttagagata ggaattttta aaaatcaaaa 1020
caaaaaatac cacagcttag tgtaaatgac aatttggcgg ttttatgtct ttagaaatgt 1080
tttgcccttc taagccttgt gctaaaggcg tataacgggt gtgcctatct acttaagggg 1140
gcattctagt cttaacttaa aagtgtgcta aactgtccct ccctggcttt ttttggtttg 1200
gggtagacct aagggtgttt gttagtctca aaactgtgaa gtgacatgtc agaacagttc 1260
agactggtaa gaaaattaat ggcttcactt gaatttaaac cagctctaga taggaaaaaa 1320
atcagtctcc tcatttgctt tttaaatgga gtagtacatc ccatatttta gaacaagtag 1380
gggtgccttg cttaataaaa aatagcattt aatgtataat tgtgtgaagg gtttatggat 1440
aaagctgtac ttctgtcaca atgtggcagt actttctgct ttaatatata acagcttggt 1500
atttaaatat tggacaaaat ggctggcttc aaaatatagt cattaataaa ctaactttat 1560
gtgcacctgt gtaggagaat caaaatcctg tatgctttct ttgccttggt cctgttctca 1620
gggtgacgac tgccaccagg agatgcagtt ctagtcttta aaattaaatt tgcccagggt 1680
tctgacaggt gatacctgga agagagacta tgtcttctct tacttaatac ataaccatct 1740
ttgattacca gctaagatgc gaaatcactg tactgtagtc aataaatgaa gacttggttc 1800
aggaaaaaaa aaaaaaaaaa aaaaaaaaaa aagttttgcc ctatagtgat cgtttacaag 1860
tcgacg 1866
```

<210> 611

<211> 2176

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (2162)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2168)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2169)
<223> n equals a,t,g, or c

<400> 611
gccacgcgt cccatcaact ctaaatccaa aatcttatct gagtctcacc aactcaaaaag 60
tctcaaatct cacattgaag ccatctaaat taagtttggg agaggatctg tgtgtgattt 120
ctgggacata attccaactg tgcacttggtg aacctagaaa acaagttatc tgttcccaag 180
tatgatggca tgacaggcag acaataatag ttacacacgt tcctgttcaa aaagcagaaa 240
cagatggaaa aaggagccat cagcaccaat caatttacia aaccagcgag gcacccttct 300
ttaagtttca aggccctggga gtaattcttca gtcactgct gttctctggg cttgttgact 360
gtctcagagt catctttact ttttcacaaa aggtagcaca cgtttgacgc tgagtatcaa 420
cttatcagtt tgttcttctt ttatattctc taaagctttc tgtaaaaaat ggtggtgctt 480
ctgctgctat aacgttggtc agaaacttgt gggctcttta catatgtcac agggatgcac 540
tcatttagat aggaggctcc tcacgtatct ttccctggaaa atcctgtctc tgtttttggc 600
tttttctgaa atagctgaga ggatctatga ttcacaccct taatatcttc aaagagtcct 660
gtgtgtgacc tgataytcag accttttgat gtttctgaag tattagcaaa aggttatata 720
gccatatctt catcactttc tctagagtaa aggtgtcct gacggtgaat cttagtttta 780
tggtgttttg ccatttgaa aggcgcgcaa tttcccaaat catcaagtc tggtttcttt 840
atatttaaca ggtcttccct caatctacat ctttccacat tttactataa tcagcaagaa 900
gacagcaggc tgtaccttcc acagcttgct tggaaatatc ctcagctaaa tattgaagtc 960
atcacttaaa agttctgctt tacacataac ggcaggacac aactcagctt agcttttctc 1020
cactatgtaa caaggactcc tttcctccac ttctccagta acatattcct ctttttttac 1080
caacagtcta ttcattgatga tttagatatt ctatggcaat cgaggatttc tctattatgc 1140
tccttttctt aaggccgccc tagcattaac attccatatt tctactaaca gtctgtttta 1200
ggcagtttag cttcttttct ggcattgctc tcagaattct tccagcctcc acctactgcc 1260
caattccaga gccacttttc tacttttagg tatttggtac agcagcacct caagtaccta 1320
gaaaactctt ttatgcctgc ttctctgcca gatgacttga atatggtact agatttgga 1380
ttcacctttc tccagggtca ctgtttattt caaagaggtg aatttacctg tgctagggtt 1440
ttcacactgg gagtgctacc agaactacca caggatgaaa gtggtgagcc caccactgca 1500
gagaagtttt ctcagtgccg taatatagag gaattctcaa aataagccct actccttttc 1560
acttactgaa aacaacttgg ataattgtga acagccagcc ccatttcaaa aagattacca 1620
ggggtaaaac aactttttca tgggtcaaaa tcatcttccg aagaaaatga tttcttaaaa 1680
gaattgaaca ttgtaaatca aagggcattg tcctgttttg gattaacaaa acaggaaaaa 1740
taaccaatcc ttgtaaaatt atttgaaatt ttcttgtttt tatcagttga gtgcctatag 1800
atgcacatac aaaaacaact gccatttttg tatataatag tcttccaaga tagagattta 1860
cattaggaga gaattaaaca tccaggaggg atgaacagta tttcatgtgt gctatgtagt 1920
gttttgcttc attgagagtc attttcatga attattttta ctactgcagt catcttaaat 1980
ttataatcat ctcaaaaaag atgtcacaat gaacagacaa ccatctgtga ggtcagtcac 2040
tttgcatgat gtatgtaatc aaaaagtgtt aaatgtctgc ttactaataa agaattgttt 2100
cactgaaact taaaaaaaaa aaaaaaaaaa aaaaaccccg gggggggggc cggtaccaa 2160

tncccccnna aggggg

2176

<210> 612

<211> 3619

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (22)

<223> n equals a,t,g, or c

<400> 612

```
ggtggcttcc gngcccgga c tncatttcc agcggttgct ggttctgacg ggttgtagtc 60
tgccaggaca atgagttatg actaccatca gaactggggc cgtgatgggg gtccccgcag 120
ctccgggtggg ggctatggag gggggccagc aggggggtcat ggaggtaacc gaggctccgg 180
aggagggcggc ggcggcggag ggggtggtcg aggcggcagg ggccggcatc ccgggcacct 240
gaaagccgcg aaatcggcat gtggtacgcg aaaaaacagg ggcagaagaa caaggaagcg 300
gagaggcaag agagagctgt agtacacatg gatgaacgac gagaagaaca aattgtacag 360
ttactgaatt ctgttcaagc gargaatgat aaagagtcag aagcacagat atcctgggtt 420
gtccttgagg atcatggata cgggtactgaa gtttctacta agaacacacc atgctcagag 480
aacaacttg acatccagga aaagaagttg ataatcaag aaaaaaaat gtttagaatc 540
aggaaacagat catatattga cccgagattc tgagtatctc ttgcaagaaa atgaaccaga 600
tggaacttta gacaaaaaat tattggaaga ttacaaaaag aaaaaaaatg accttcggta 660
tattgaaatg cagcatttca gagaaaagct gccttcgtat ggaatgcaaa aggaattggt 720
aaatttaatt gataaccatc aggtaacagt aataagtggt gaactggttg tggcaaaacc 780
actcaagtta ctcagttcat tttggataac tacattgaaa gaggaaaagg atctgcttgc 840
agaatagttt gtactcagcc aagaagaatt agtgccattt cagttgcgga aagagtagct 900
gcagaaaggg cagaatcttg tggcagtggt aatagtactg gatatacaat tcgtctccag 960
agtcggttgc caaggaaaca gggttctatc ttatactgta caacaggaat catccttcag 1020
tggtccagtc cagaccgta tttgtccagt gttagtcata tcgtacttga tgaaatccat 1080
gaaagaaatc tgcagtcaga tgttttaatg actggttgta aagaccttct caattttcga 1140
tctgacttga aagtaatat gatgagtgca acattgaatg cagaaaagtt ttcagaatat 1200
tttggttaact gtccaatgat acatatacct ggttttacct ttccggttgt ggaatatctt 1260
ttggaagatg taattgaaaa aataaggtat gttccagaac aaaaagaaca cagatccag 1320
tttaagaggg gtttcatgca agggcatgta aatagacaar aaaaagaaga aaaagaagca 1380
atatataaag aacgttggcc agattatgta agggaactgc gaagaaggta ttctgcaagt 1440
actgtagatg ttatagaaat gatggaggat gataaagttg atctgaattt gattgttgcc 1500
ctcatccgat acattgtttt ggaagaagag gatggtgcga tactggtctt tctgccaggc 1560
tggaacaata tcagcacttt acatgatctc ttgatgtcac aagtaatgtt taaatcagat 1620
aaatttttaa ttataccttt acattcactg atgcctacag ttaaccagac acagggtgtt 1680
aaaagaaccc ctctgtgtgt tcggaaaata gtaattgcta ccaacattgc ggagactagc 1740
attaccatag atgatgtcgt ttatgtgata gatggaggaa aaataaaaaga gacgcatttt 1800
gatactcaga acaatatcag tacaatgtcc gctgagtggt ttagtaaaagc taatgccaaa 1860
cagagaaaag gtcgagctgg aagagttcaa cctggtcatt gctatcatct gtataatggt 1920
cttagagcaa gtcttctaga tgactatcaa ctgccagaaa ttttgagaac tcctttggaa 1980
```

```
gaactttgtt tacaaataaa ggwttttaag gctaggtggr attgcttatt tctgagtaga 2040
ttaatggrcc caccatcaaa tgaggcagtg ttactctcca taaggcamct gatggagctt 2100
gaacgctttg gataaacaag aagaattgac acctcttgga gtccacttg cagattacc 2160
cgttgagcca catattggaa aaatgattct ttttgagca ctgttctgct gcttagaccc 2220
agtactcact attgctgcta gtctcagttt caaagatcca tttgtcattc cactgggaaa 2280
agaaaagatt gcagatgcaa gaagaaagga attggcaaag gatactagaa gtgatcactt 2340
aacagttgtg aatgcgtttg agggctggga agaggctagg cgacgtggtt tcagatacga 2400
aaaggactat tgctgggaat attttctgtc ttcaaacaca ctgcagatgc tgcataacat 2460
gaaaggacag tttgctgagc atcttcttg agctggattt gtaagcagta gaaatcctaa 2520
agatccagaa tctaataata attcagataa tgagaagata attaaagctg tcatctgtgc 2580
tggtttatat cccaaagtgt ctaaaattcg actaaatttg ggtaaaaaaa gaaaaatggt 2640
aaaagtttac acaaaaaccg atggcctggt tgctgttcat cctaaatctg ttaatgtgga 2700
gcaaacagac tttcactaca actggcttat ctatcaccta aagatgagaa caagcagtat 2760
atacttgtat gactgcacag aggtttcccc atactgtctc ttgttttttg gaggtgacat 2820
ttccatccag aaggataacg atcaggaaac tattgctgta gatgagtggga ttgtatttca 2880
gtctccagca agaattgcc atcttgttaa ggaattaaaga aaggaaactag atattcttct 2940
gcaagagaag attgaaagtc ctcatcctgt agactggaat gacactaaat ccagagactg 3000
tgcagtactg tcagctatta tagacttgat caaaacacag gaaaaggcaa ctcccaggaa 3060
ctttccgcca cgattccagg atggatatta cagctgacag cttttcagggt gtggtctgaa 3120
aagccagttt gacagccatt ctcatcatt gtttaaattt tggctggatg ccaaaccctg 3180
ggacatgaac aattttcatg tgtaaggtag aagccttcag taggtagtaa agacttaatg 3240
tgcagtactt gatgttata gtagagatat atatatatat atatatacca taaaagcaat 3300
atgttctctg atcatatact ctgctgtggt catgcccact ctttgggagt atattccctt 3360
tatatatatt gagtattgta ccacttgaga aattcctttg ttctgttata caaaattaat 3420
ctttctgctc ataattgatt atgataccac cagtaaaaaat aggatgttta ccccaaaaca 3480
agtgtcaatt aagaatttga acacaaccac attttttaaa atgaaacttc tatcggaagt 3540
aaattaattt gttgtaataa agtccagtat ttaataaaat gtacaatgtt aaatctcaaa 3600
aaaaaaaaa aaaaaaaaaa 3619
```

<210> 613

<211> 1427

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (297)

<223> n equals a,t,g, or c

<400> 613

```
ggaattgtta gctgtggtcg gccccgtggg agcagggaag tcatcactgt taagtgccgt 60
gctcggggaa ttggcccaa gtcacgggct ggtcagcgtg catggaagaa ttgcctatgt 120
gtctcagcag ccctgggtgt tctcgggaac tctgaggagt aatattttat ttggraagaa 180
atmcgaaaag gamcgatatg aaaaagtcac aaaggcttgt gctctgaaaa aggatttaca 240
gctgttgag gatggtgatc tgactgtgat aggagatcgg ggaaccacgc tgagtgnagg 300
scagaaaagca cgggtaaacc ttgcaagagc agtgtatcaa gatgctgaca tctatctcct 360
ggacgatcct ctcaagtgcag tagatgcgga agttagcaga cacttgttcg aactgtgtat 420
ttgtcaaatt ttgcatgaga agatcacaat tttagtact catcagttgc agtacctcaa 480
agctgcaagt cagattctga tattgaaaga tggtaaaatg gtgcagaagg ggacttacac 540
tgagttccta aaatctggta tagatttttg ctccctttta aagaaggata atgaggaaa 600
tgaacaacct ccagttccag gaactcccac actaagggaat cgtaccttct cagagtcttc 660
```

```
ggtttgggtct caacaatctt ctagaccctc cttgaaagat ggtgctctgg agagccaaga 720
tacagagaat gtcccagtta cactatcaga ggagaaccgt tctgaaggaa aagttggttt 780
tcaggcctat aagaattact tcagagctgg tgctcactgg attgtcttca ttttccttat 840
tctcctaaac actgcagctc aggttgctta tgtgcttcaa gattggtggc tttcatactg 900
ggcaaacaaa caaagtatgc taaatgtcac tgtaaatgga ggaggaaatg taaccgagaa 960
gctagatctt aactggtagt taggaattta ttcagggtta actgtagcta ccgttctttt 1020
tggtcatagca agatctctat tggtagtcta cgtccttgtt aactcttcac aaactttgca 1080
caacaaaatg tttgagtcaa ttctgaaagc tccggtatta ttctttgata gaaatccaat 1140
aggaagaatt ttaaactcgt tctccaaaga cattggacac ttggatgatt tgctgccgct 1200
gacgttttta gatttcatcc aggtaacgtt gagagtaatg tcaggatctc aaatggaaaa 1260
cggaagtcc tattttttca agcccttttc atggggtctg ggggtgggac tctcggcctg 1320
gctgtgtgta atgttaactt aataaagggc catgtttgta aaagaaaaaa aaaaaaaaaa 1380
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agcggcc 1427
```

<210> 614

<211> 1433

<212> DNA

<213> Homo sapiens

<400> 614

```
cggaagtgcg agctggcgca ctgcagtctg ggagtctttg gagtaagaat ggccttgga 60
gggatgagca aacggaagag aaagagaagt gtccaggagg gagagaatcc tgacgacggc 120
gttcgcggga gtccgccgga agactacagg cttggacagg tcgccagtag cttatttcgc 180
ggcgaacacc attccagagg tggcaccggt cggctggcgt ccctcttcag ttctctggag 240
ccccagattc aacctgtgta cgtgcctgtg cctaaacaaa ccatcaaaaa aacgaaacgg 300
aatgaggagg aagaaagtac atcccagatt gaaagaccac tttcgcaaga acctgccaaa 360
aaagtgaag cgaagaagaa acacactaac gcagaaaaaa agttggcaga cagggaagc 420
gtctagcga gtgctgattt agaagaagaa attcaccaga aacaagggca gaaaaggaaa 480
aattctcaac ctggtgttaa agtagcagat agaaaaatac ttgatgacac agaagacaca 540
gttgtcagtc aaagaaagaa aattcaaata aaccaagaag aagagagatt aaagaatgag 600
agaactgtgt ttgttgggaa tttgcctgtt acatgtaata agaagaagct gaagtcgttt 660
tttaagagt atggacaaat agaactctgt cgatttcgtt ctctgattcc agcagagggg 720
acgctatcca aaaagtggc agcaataaaa cgtaaaattc atcctgatca gaaaaatatt 780
aatgcctatg ttgtgtttaa ggaggagagt gctgccacgc aagcattgaa aagaaatggg 840
gcccagattg cagatggatt tcgtattaga gttgatctcg catctgagac ctcatctaga 900
gacaagagat cggtttttgt gggaatctc ccttataaag ttgaagaatc tgccattgag 960
aagcactttc tggactgtgg aagtatcatg gccgtgagga ttgtgagaga caaaatgaca 1020
ggcatcggca aagggtttgg ctatgtgctc tttgagaata cagattctgt tcactctgct 1080
ctgaaattaa ataattctga actcatgggg agaaaactca gagtcatgag ttctgttaat 1140
aaagaaaaat ttaacaaca aaattcaaat ccacgattga agaattgtcag taaacctaa 1200
cagggactta attttacttc caaaactgca gaaggacatc ctaaaagctt atttattgga 1260
gaaaaagctg ttctccttaa aacgaagaag aaaggacaga agaaaagtgg acgccctaag 1320
aacagagaa aacagaaata acaaccagga actgcttttt cttttcctgc tgagtactgc 1380
taataaaagt gctattatct gctgatagca tcgtctgcta aaaaaaaaaa aaa 1433
```

<210> 615

<211> 506

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<400> 615

```
aagctacacn tgtccagcat cagagaatcc atactggaga aaggccttat gaatgcascg 60
aatgtggaaa aaccttcagt cgaaaagaca accttactca gcacaagaga atccacactg 120
gagaaatgcc ttataagtgc aatgaatgtg ggaratattt tagccatcac tccaatctaa 180
ttgtacacca gagagttcac aatggagcaa ggccttataa gtgcagtgat tgtgggaaag 240
tcttcagaca caaatctaca cttgttcagc atgagagtat tcacactgga gaaaatcctt 300
atgttgcagt gttgtgggaa atcctttggc cacaataca ccctcattaa acatcagcga 360
attcacactg agtcaaagcc gtttgagtgc atgaatgcgg gaaatcttta gtcgaagtct 420
gatatattgc acacagaggg tcacactggt gaaaggcctt tgtgtgcgta atgtggaagc 480
ttwtcgactc cacctgttgg accaag 506
```

<210> 616

<211> 2174

<212> DNA

<213> Homo sapiens

<400> 616

```
atttgtactt tgtgaaggga gatgaaagga cgtttgaagt atatataatt tgtcaagagg 60
aaagaagata aaactatgcc agttttatat caatagcttg tagaagctca gctcttcttg 120
gtcttggcta gactgcctag attccacarg cagacaagggt tgagaatcca ttgctggaat 180
cttggtattg atgagttaca gtgatggaac atgtgcttgg ccacaggcag gtccagtcac 240
tgcaaaagtg accaagccag caggtcaccc ttaacttcag aaacaattat tgggtgtgaa 300
ctgtacttaa attgcagaga aacctgtaag taatggaagg taaagaaaaa ttacagaatg 360
gaaaataata ttttgggcaa gcaaacaaat tcactgagaa ttccaaaagt atattaaaaa 420
agaagatagc tatgagttca gatctatctt attggtcttt aatattacaa ccaatcctta 480
actttccact ataaaggaag gattactaga ttgattactt tctggataga taatctggta 540
ataaatgata ggtaaatcaa aaattacttt tatttaggag tttgaattct tactctcatc 600
agacattttt tttctaggga cgcttactaa ttaaatgatt taagtgtgtt cttaggggtt 660
ttttgcctat atatttatga ctgtgttaat gagtagtgaa atgatgcgga aagacagcta 720
tcaggaagag gaaatacaga agcctgaata atctatgggt tagaaaagca tccctgaata 780
atcaaaaatt ggcagtatgt gcattgttct caagcctttt tatgaaaatg aaatctgaaa 840
tcaccaaattg taaacctggg aacattattc tagtgttgct gtcttggatt catgttaaga 900
agcgtcttca ttctttgctc atgttgccca cttcttgtgg atttgtctga gtgttttttg 960
acaatcactt ccttaaagac tcttctgaac tagttggacc tggttaatca tagagagtag 1020
cctttaatca tggatagtct tcttggatta tttttatatt tgaaaagaaa atgtttttatt 1080
tgcactactg agtaggaaga gtttaattgtt ttctttgkct tttttttgaa gtcattacac 1140
aggacttcac tccagagtta ccattatgag tgtgttcagc tctggtccac agaggatgga 1200
taaaaatggt ttgttatgtt tttttgctct gcagtgtat gagccttata tctgttaata 1260
tgaaggacaa agtcaaaagc agcagtggat agcaggaagg gtagagacta atatgtttgg 1320
gaccaaacc atctaagtta gagatttcca gatcacagag gggctgggca ttctctggag 1380
cagtcattgg ttggtgcttt attgtaatca ttttgcgcca atccccaaca attaggaact 1440
ggaccctggg aataagctga ggggtctgaa ctgttgggga agggtgactg tagccacatg 1500
gaagataaaa tatgggtttt tctgcaaaat ttccatctga gggtttttac atttaatat 1560
tttttaagac agtttaaaga gcaaacgttt ttttaagtga ttctagtgtc aaagtatgca 1620
cacatatctt gaatggcttt atttttattg tgtaaaactg ttgaacacat gactgtgatg 1680
cacaattctt ttacgtgtaa ggagtctatg cattttacag taacttattt tatgatcggg 1740
tgatgagaca gttatacttt caactgccat tattttttatt aagtgccttc attttcttta 1800
```

cagttattat aaaattgtat ttattttata cagatgggtt ttcattttcc tgatgctgta 1860
atgtttactt cagcttggtg acctttcttt gtgttatctg catgttgtaa cgtgtgataa 1920
gaatgaatgt aaaggctgtg gcaactgtaa ttaatttttg taaagggctg gtcacacgtg 1980
gatctgggtt atgaatgcat ttgggatgat ttgggtaacc agatcacctt ttcagaaatt 2040
tagatgtgaa caccaaaaga agcattttct caacaaaaat taatagctgg ttctattttt 2100
tttaaaccta gaaaaataaa agttgatatt tttcaattaa aaaaaaaaaa aaaaaaaaaa 2160
aaaaaaaaaa aaaa 2174

<210> 617

<211> 3147

<212> DNA

<213> Homo sapiens

<400> 617

tttagagaga tgggtgtcttc cagcaatctg ccacaagggg ggtagaggt ccaggggata 60
ccggaagggg gggatggtgt agcaggatgg tatcttccag gaataaaccc tggcaggact 120
gctaggcggg ttgcttatct ttttgtgaat atcaatgtga cctctgagcc tcacgaagtt 180
cttgccctgt ggttcttgtg gtatgtgaag cagtgcgggg gcaccactcg gatattctct 240
gtcaccaatg gtggccagga acggaagttt gtaggtggat ctggtcaagt gagcgaacgg 300
ataatggacc tcctcggaga ccaagtgaag ctgaaccatc ctgtcactca cgttgaccag 360
tcaatgaca acatcatcat agagacgctg aaccatgaac attatgagtg caaatacgtg 420
attaatgcga tcctccgac cttgactgcc aagattcact tcagaccaga gcttccagca 480
gagagaaacc agttaattca gcgtcttcca atgggagctg tcattaagtg catgatgtat 540
tacaaggagg ccttctggaa gaagaaggat tactgtggct gcatgatcat tgaagatgaa 600
gatgctccaa tttcaataac cttggatgac accaagccag atgggtcact gcctgccatc 660
atgggcttca ttcttgccc gaaagctgat cgacttgcta agctacataa ggaaataagg 720
aagaagaaaa tctgtgagct ctatgccaaa gtgctgggat cccaagaagc ttacatcca 780
gtgcattatg aagagaagaa ctggtgtgag ggcagtagt ctgggggctg ctacacggcc 840
tacttccctc ctgggatcat gactcaatat ggaagggtga ttcgtcaacc cgtgggcagg 900
attttctttg cgggcacaga gactgccaca aagtggagcg gctacatgga aggggcagtt 960
gaggctggag aacgagcagc tagggaggtc ttaaatgggtc tcgggaaggt gaccgagaaa 1020
gacatctggg tacaagaacc tgaatcaaag gacgttccag cggtagaaat caccacacac 1080
ttctgggaaa ggaacctgcc ctctgtttct ggcctgctga agatcattgg attttccaca 1140
tcagtaactg ccctgggggt tgtgctgtac aaatacaagc tcctgccacg gtcttgaagt 1200
tctgttctta tgctctctgc tcaactggtt tcaataccac caagaggaaa atattgacaa 1260
gtttaagggc tgtgtcattg ggccatgttt aagtgtactg gatttaacta cctttggctt 1320
aattccaatc attgttaaag taaaaacaat tcaagaatc acctaattaa tttcagtaag 1380
atcaagctcc atcttatttg tcagtgtaga tcaactcatg ttaattgata gaataaagcc 1440
ttgtgatcac tttctgaaat tcacaaagtt aaacgtgatg tgctcatcag aaacaatttc 1500
tgtgtcctgt ttttattccc ttcaatgcaa aatacatgat gatttcagaa acaaagcatt 1560
tgactttctg tctgtggagg tggagtaggt gaaggcccag cctgtaactg tcctttttct 1620
tcccttaggc aatggtgaac tgtcattaca gagcctagag gtcacagcc tcctggagga 1680
agcagcctcc actttggatc aggaaatagt aaaggaaagc agtggtgggg gtagcggcat 1740
gcagaccctc agaccagaat ggggacatct tgtggtctgc tgccctcagga atctcctgac 1800
cacttgtagt ccctccgact tctctagaca tctagtctca gtgctagctt atttgtattt 1860
ttcctctttc acttcttatg gaggagagtg tttaactgag ttagaatgtt gaaactgact 1920
tgctgtgact tatgtgcagc tttccagttg agcagaggaa aatagtggca ggactgtccc 1980
ccaggaggac tccctgctta gctctgtggg agaccaacta cgactggcat cttctcttcc 2040
ccctggaagg cagctagaca ccaatggatc cttgtcagtt gtaacattct atttcaactt 2100
caggaaagca gcagttttct ttttaattttt cctatgacca taaaattaga catacctctc 2160
aacttacata tgtcttcaac atggttacct ctgcataaat attagcaaag catgccaat 2220

tctcttaagt actgaaatac atatgataaa tttgactggt atttggtgag actatcagac 2280
agaaaagaaa ttagggctct aatttcctta aagcaagctc acttgcttta gttgttaagt 2340
tttataaaaag acatgaaatt gagtcatttt atatatgaaa actaagttct ctatcttagg 2400
agtaatgtcg gccacaagg gtgccacct cttgttttcc ctttttaaaa actcagattt 2460
ttaaagccc tttccaaagg tttcaactgt aaaatacttc tttttacaat gtatcaacat 2520
atTTTTattt aagggaatt aacaattgcc agggaaacca gccaaaccaa gtttattata 2580
tcattaacct tatcataaat tcaaacctaa gttgctggac cctggtgtga ggacataaat 2640
cttccaaagt tttgcctatc ctaagagctg ctttttcta ctgctcttta ccttgcatth 2700
tagctaattt aggagttttg agaattgtatt ggatacgtc cagtacataa ggagttgccg 2760
catattatat cagactgctt tgagaaatct catccctagt ctattgcagt tgtttctatt 2820
agcttactga ttaactcagt cctgacacac cttttgggaa atgctgattt aaacttctta 2880
actggcaaca gttggaacag taatcagttt gctaacatat ttaaagtctt gaattgtgaa 2940
gaactcatgt gatttaccct tttcaacttt ttggaaaacg atttaattta atccaattag 3000
attaacccta ttaaatcttg ggttgggtat ccaaatgaat gccagtccga tgttgccaga 3060
cacgaaattg ggagccaggg atctcacgaa atgcagttca tcccacgcgg aggtagcaca 3120
agccttttgc tcttagccga gagatga 3147

<210> 618

<211> 2529

<212> DNA

<213> Homo sapiens

<400> 618

gcgctgtttg tggcccaggt gcaggaagct tacgcggtgg cagccgctcg ctgaggtagt 60
ctctcgcggc gccggggatc cctgaacaca gacagcgcgg gactgagaag gaaagcttct 120
ttctgggagc ccagagccgc aaaggtggag ccgcgttggc gccctccgcg ggaccagcgc 180
ctcggatgag ggcggagcgc gggggccgcg gctgcgggag cgcgaacggc gkgccagggg 240
cgctcatgt gagagccgcg ggacctgcag ccgcgcgcgt ccccgagca cgggtkgtgt 300
gtgggggaa cgcggccgcg cagcargtgg acagcagcaa ggaatcagct gaagcagctt 360
gtgatatact atcgcaactt gtgaattgct ctttaaaaac acttggactt atttcaactg 420
ctcgaccaag ctttatggat ttaccaaagt ctactttat ctctgcactg acagttgtgt 480
tcgtaaaact caaatccctg tcttcgctta agatagatga tactccagta gatgatccat 540
ctctcaaagt actagtggcc aacaatagtg atacactcaa gctgttgaaa atgagcagct 600
gtcctcatgt ctctccagca ggtatccttt gtgtggctga tcagtgtcac ggcttaagag 660
aactagccct gaactaccac ttattgagtg atgagttgtt acttgcatth tcttctgaaa 720
aacatgttcg attagaacat ttgcgcattg atgtagtcag tgagaatcct ggacagacac 780
acttccatac tattcagaag agtagctggg atgctttcat cagacattca cccaaagtga 840
acttagtgat gtattttttt ttatatgaag aagaatttga ccccttcttt cgctatgaaa 900
tacctgccac ccatctgtac tttgggagat cagtaagcaa agatgtgctt ggccgtgtgg 960
gaatgacatg ccctagactg gttgaactag tagtgtgtgc aaatggatta cggccacttg 1020
atgaagagtt aattcgcatt gcagaacgtt gcaaaaattt gtcagctatt ggactagggg 1080
aatgtgaagt ctcatgtagt gcctttgttg agtttgtgaa gatgtgtggt ggccgcctat 1140
ctcaattatc cattatggaa gaagtactaa ttcttgacca aaagtatagt ttggagcaga 1200
ttcactggga agtgtccaag catcttggtg ggtgtggtt tcccgacatg atgcccactt 1260
ggtaaaaact gcatgatgaa tagcacctta atttcaagca aatgtattat aattaaagt 1320
ttatttgctg tagttctgat ataattctac tattttgtgg cacagaaatt tgatatcttc 1380
agtcagtata tgtaaagatt gtttatcgga agacccatga atgagttttg gtcagaaaat 1440
tccacttggt tcttagtgt aatagcagtc atatctccga atttttttta atgtggttcg 1500
gatgtgaaat aaccagttat acgtattaaa cagtttacag tctaaaggaa acaaaaccta 1560
tatgttataa tatccaagaa gtactaatag gttttctgaa atgttatatt ctctatgcat 1620
ttaaaaaaaa atgtaaactt gacatttttag ggtcttcagt tacacataca cctgttataa 1680

```

gggtgtttaat atagctcagg aaagtgagca ttttgtgaga aaaatgaata tatcatatct 1740
aatggaaaag attggatgaa tgttctcaaa tgttacaaag ctgttttaaag aaaaaggat 1800
atataagtaa tcagaacact tagaagactg atagatgtca cacagtggta ttatagaagg 1860
ataatacaga gccaaagatca aattaaaaga caataaatgg aacagaaggg aggcagtgtt 1920
tagcttttga taaactttta ggtttgctct gtaatctgct aaacatata cattcttttg 1980
tgatatgtta ttatgtatgt ggcacttgag gcactgtatg taaagtaagg aatgctttac 2040
tagttctcct tggttttatc tttgtttaaa ctagctttta agtattaaac aataattgaa 2100
atgaaaagct tacctatttt aaaaagccaa atttaaataa atatagaact ttaaaatgtt 2160
tatcagttgt ttccatgaaa gaatattagt ttccagtaaa ttttagtgat ggctcactca 2220
cttttctatt ttggaattac atagttatgt aagtaaaatt tttaaaaatc ataaaggagg 2280
caccattgta cagtctagca taaacagcaa attttaaaga ggacatattt aagttcataa 2340
tcatattttt cagtaaatat tgctcagtga actggaaaac ttaaatagaa aaatgtctgc 2400
agttttgtga ttgttaattt ggtaaaccg atattttata ttatttaagt taggtaacat 2460
tttatattac tttcatatga ataaaagtaa tccatgcatt gtaaaaaaaaa aaaaaaaaaa 2520
aaaaaaaaa 2529

```

<210> 619

<211> 551

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<400> 619

```

gcgagnaggg cagtgcact gagcgggccc agggggccga gtcggagacc gtgccggagt 60
tcgggagcgg caacagagtg ggcatagaca ctccgagcag cctcgcgcgt gtctctgcgt 120
tcctgttgac tgccctggctg cccctctccc tactcctcgg ttcctggtga agaggctgcg 180
cgctgctgtt tggggagggg gtgtgtggag ccgggtcctg tgtccgcagt ggctgctgtc 240
ggggggtcgc ctgttcgcgg aggtgcggag agactccttg ggggtcgcgc acataacggg 300
gttcgggtgt ctcgtgtgtg aacatcacag ggtttgtgga tgcacttaga tgtttgcaat 360
gagcactgtg gctggcatgc cccagtgttt tggataccaa tgcataggac tccatagtaa 420
tcgaatttac cagaggcgaa cgtcatgsag catagtgatc ccattggggg ttgatacagc 480
agagacgtca wacttggraa atggctgcar gttcagaaym agtawttaa attggttaca 540
aaagcaaaaa a 551

```

<210> 620

<211> 1735

<212> DNA

<213> Homo sapiens

<400> 620

```

ctcctcactt cttgactgta tttgtactat gttgaaaaaa tctcctgtcc acaaagacat 60
aagcctaaca acctagaaaa acaacagggt actactggca ttacagaact tctttgcctt 120
tcaaaacaaa agcaaaacac agtgaacttc accacggagc tgcacagcgt ggggaactca 180
tccatcactt tcaaaattag agtcatttga tccaagttgg agtcagacac agtatttgag 240
ctgcacggct tctgggttct cccaccttat ttgatcatat tcgaaagatt atttcctgtg 300
tttgctttga tttgttcctc agtacattaa aatgatccac accttgaaca ctgccctctc 360
tagaagggtg attttgatca gccttttgaa gatgggtgtc gtttccctaa cttatctcac 420

```

agaattttga gtgttgatt tggcaagttc tgagatttgc cttctgtctt atgccaaaca 480
cccccttcta agagctgtcc cgccttagtt ttagaagtac taggggtttt catacttatt 540
ttatagaaca cccatttata tttatttctg tatatagaac taaaaaaaaac agtagtgta 600
aaaatctttg ttgtgggttg agcatctttg ctgcttttgg attgagatgg cgaatcaagg 660
cttcacttcc tctctcttct gtcttttagaa agctgtgatc gtgcgtgcaa ttatttgaaa 720
ggcaacatag tcaattaaga aacctgtagt tgttaaggaa gaaattgttg gcaagatata 780
catactgccc atatctcgtt ggtgcaataa ttaaatagca aaggaaatct gtattggcaa 840
ctattataat tcaataattc ttttggtttac tgcccttttc tgttcaagaa ttttctggaa 900
attactccct ttcacatggt tgaactctta agttgaccag ttctcatagc tctatcacta 960
gaatgggttg cagatacccc aaacatacta tgataaaatc aaattgtgct acttttgacc 1020
catgtaattt acctaaaagt tgtaattgct gacagagtac tgccttgaat ttgggtttaa 1080
aacctctcta gtttcaatga caagtaacaa ctcaaataat tccatattgt ttgaggargr 1140
ggccataatc cttctgaatt gttggcacta agtaattggga tttggcccag taagtatgay 1200
ggtcgtgtcg cctaaccaac gcagagcagt gctttttgtg tggctgaagc gatgtgctga 1260
cgaaaaaagg aaaattctag gacaatcgtt ggctaaaaat caccttagga tgaaaaattt 1320
gaggcaaatt tttttaaatg acagaaaaag ataatcatct cacttgcttg aaacaggagc 1380
cagcatgata tctggaagca tcaactatcc ctgcgtgtga ttgttgaaag ctctttcact 1440
gttttgcatc ctagtgtgaa tagtttgtat tgaaattgga ttcctatctt gtgtatgttt 1500
ttggtgcgta aaaggaaaaa attggtgtca ttacttttga aatttgacag acgaagggca 1560
tgcttttggg ttgctgtaag attgtattct gtatatatgt tttcatgtaa ataaatgaaa 1620
atctatatca gagttatatt ttaattttta ttctaaatga aaaaaaccct ttttacttca 1680
aaaaaattgt aagccacatt gttaataaag taaaaataaa ttctaaaaaa aaaaa 1735

<210> 621

<211> 1026

<212> DNA

<213> Homo sapiens

<400> 621

tccggaattc ccgggtcgac ccacgcgtcc gctttcatct gaccatccat atccaatggt 60
ctcattttaa cattaccag catcattggt tataatcaga aactctggtc cttctgtctg 120
gtggcactta gagtcttttg tgccataatg cagcagtatg gagggaggat tttatggaga 180
aatggggata gtcttcatga ccacaaataa ataaaggaaa actaagctgc attgtgggtt 240
ttgaaaagggt tattataact cttaacaatt ctttttttca gggacttttc tagctgtatg 300
actgttactt gaccttcttt gaaaagcatt cccaaaatgc tctatttttag atagattaac 360
attaaccaac ataatttttt ttagatcgag tcagcataaa tttctaagtc agcctctagt 420
cgtggttcat ctctttcacc tgcattttat ttggtgtttg tctgaagaaa ggaaagagga 480
aagcaaatac gaattgtact atttgtacca aatctttggg attcattggc aaataatttc 540
agtgtggtgt attattaaat agaaaaaaaa aattttgttt cctagggtga aggtctaatt 600
gatacgtttg acttatgatg accatttatg cactttcaaa tgaatttgct ttcaaaataa 660
atgaagagca gctgtccttc tttcctcttt taagtgttca gctgtggcat gctcagaggt 720
tcctgtgga ttccagctgg agcgggtgtga tacccttctt tttcagctgt tcgtgccttc 780
ctttcttgta tccaccaag tgagacaaa tacatgatct caaagataca cagtacctac 840
ttaattccag ctgatgggag accaaagaat ttgcaagtgg atgggttggt atcactgtaa 900
ataaaaagag ggcctgggaa ttcttgcgat tccatctcta ctttgataaa gtctcatttt 960
gtgccttaca catctgcagt atttatcatg ttccaacttg gtgactgtca ggcagtgcaa 1020
tacatc 1026

<210> 622

<211> 670

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (598)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (645)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (649)

<223> n equals a,t,g, or c

<400> 622

```
gtggtaggcg cgctgcgtaa agaggcctgc rgtcccgcgg cgcggggcag gttccgggct 60
gcttaggttg gcaccgggcc gtggtccccg ggggcgcagt cgcagcgctc ccgccctcca 120
ggcgtcagcg agtgcgcggt ccagtgcggc cggaacctgg cgcaactcct agagcgggtcc 180
ttggggagac gcgggtccca gtcctgcggc tcctactggg gagtgcgctg gtcggaagat 240
tgctggactc gctgaagaga gactacgcag gaaagcccca gccaccatc aaatcagaga 300
gaaggaatcc accttcttac gctatggcag gtaagaaagt actcattgtc tatgcacacc 360
aggaacccaa gtctttcaac ggatccttga agaattgtggc tgtagatgaa ctgagcaggc 420
agggtgcac cgtcacagtg tctgatttgt atgccatgaa ctttgagccg agggccacag 480
acaaagatat cactggtact ctttctaate ctgaggtttt caattatgga gtggaaacct 540
acgaagccta caagcaaagg tctctggcta gcgacatyac tgatgagcag aaaaaggntt 600
cggaaggtt gacctartga tatttcaagt tcccgttgta ctggnctanc gtgccrgcca 660
ttcttgaaag                                     670
```

<210> 623

<211> 2163

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<400> 623

```
gaattcggca cgagggacgc tgagcgganc cgcggggcgg agggcggacg gaccgactga 60
cggtagggac gggaggcgag caagatggcg cagacgcagg gcaccggag gaaagtctgt 120
tactactacg acggggatgt tggaaattac tattatggac aaggccacc aatgaagcct 180
caccgaatcc gcatgactca taatttgctg ctcaactatg gtctctaccg aaaaatggaa 240
atctatcgcc ctcaaaaagc caatgctgag gagatgacca agtaccacag cgatgactac 300
attaaattct tgcgtcccat ccgtccagat aacatgtcgg agtacagcaa gcagatgcag 360
agattcaacg ttgggtgagga ctgtccagta ttcgatggcc tgtttgagtt ctgtcagttg 420
tctactgggt gttctgtggc aagtgtgtg aaacttaata agcagcagac ggacatcgct 480
gtgaattggg ctgggggcct gcaccatgca aagaagtccg aggcattctg cttctgttac 540
```

```
gtcaatgata tcgtcttggc catcctggaa ctgctaaagt atcaccagag ggtgctgtac 600
attgacattg atattcacca tgggtgacggc gtggaagagg ccttctacac cacggaccgg 660
gtcatgactg tgccttttca taagtatgga gagtacttcc caggaactgg ggacctacgg 720
gatatcgggg ctggcaaagg caagtattat gctgttaact acccgctccg agacgggatt 780
gatgacgagt cctatgaggg cattttcaag ccggtcatgt ccaaagtaat ggagatgttc 840
cagcctagtg cgggtggtctt acagtgtggc tcagactccc tatctgggga tcggtttagt 900
tgcttcaatc taactatcaa aggacacgcc aagtgtgtgg aatttgtcaa gagctttaac 960
ctgcctatgc tgatgctggg aggcgggtgg tacaccattc gtaacgttgc ccggtgctgg 1020
acatatgaga cagctgtggc cctggatacg gagatcccta atgagcttcc atacaatgac 1080
tactttgaat actttggacc agatttcaag ctccacatca gtccttccaa tatgactaac 1140
cagaacacga atgagracct ggagaagatc aaacagcgac tgtttgagaa ccttagaatg 1200
ctgccgcacg cacctggggg ccaaatgcag gcgattcctg aggacgccat ccctgaggag 1260
agtggcgatg aggacgaaga cgaccctgac aagcgcacat cgatctgctc ctctgacaaa 1320
cgaattgcct gtgaggaaga gttctccgat tctgaagagg agggagaggg gggccgcaag 1380
aactcttcca acttcaaaaa agccaagaga gtcaaaacag aggatgaaaa agagaaagac 1440
ccagaggaga agaaagaagt caccgaagag gagaaaacca aggaggagaa gccagaagcc 1500
aaaggggtca aggaggaggt caagtggcc tgaatggacc tctccagctc tggcttcctg 1560
ctgagtcctt caggtttctt ccccaacccc tcagatttta tattttctat ttctctgtgt 1620
atztatataa aaattttatta aatataaata tccccaggga cagaaaccaa ggccccgagc 1680
tcagggcagc tgtgctgggt gagctcttcc aggagccacc ttgccacca ttcttcccg 1740
tcttaacttt gaaccataaa ggggtgccagg tctgggtgaa agggatactt ttatgcaacc 1800
ataagacaaa ctctgaaat gccaaagtgc tgcttagtag ctttggaag gtgcccttat 1860
tgaacattct agaaggggtg gctgggtctt caaggatctc ctgtttttt caggctccta 1920
aagtaacatc agccattttt agattggttc tgttttcgta ccttccact ggcctcaagt 1980
gagccaagaa acactgcctg ccctctgtct gtcttctcct aattctgcag gtggaggttg 2040
ctagtctagt ttctttttg agatactatt ttcatTTTTg tgagcctctt tgtaataaaa 2100
tggtagattt ctataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2160
aaa 2163
```

<210> 624

<211> 601

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (562)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (566)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (600)

<223> n equals a,t,g, or c

<400> 624

ggcgagatct tctctgtggc ggagacagcc aggttggcag ctgacgggac agccgggggc 60

tat t t t t g t t g c g g g t t t t c a g c a a a t c c a g g g c t g g t c t g g a g g c g c g a a a c t t a a g g c 120
a t a c a g a a c g a t g g a g t a t a t g g c a g a a t c c a c c g a c c g c a g c c t g g a c a c a t c t t g t g 180
c t g t g a g t g t g g t g t t c c g a t a a g t c c a a t t c t g c c a a t a t t t g t g t g c c t g t t t g c g 240
a a g t a a a g t g g a c a t c a g c c a a g t a t t c c g a a a c a a g t c t c g a t t t c g t t c t g c a a a c a 300
a t g t c a a a g g t a t t t t c a a c c a c a g g a a c t t g g a t a c a g t g t g c t t t a g a a t c c a g g g a 360
a c t t c t t g c t t t g t g c t t g a a a a a a t c a a a g c c c t c t g a g t a a g g t a c g g c t t g t a g a 420
t g c a g g c t t t g t t t g g a c t g a g c c t c a t t c t a a g a g a c t t a a a g k t a a a c t g a c t a t t c a 480
g a a a g a g g t g a t g a a t g g t g c t a t c c t t c a a c a a g t g t t t g t g g t g g a t t a t g k t g k c c c 540
c a a a t g g g g g g a g a t g g c a t a n a g a n a a c t a a g g a t t c t g g a a g g t t g g a t t a a g g g g n 600
g 601

<210> 625

<211> 593

<212> DNA

<213> Homo sapiens

<400> 625

g a t g c a g t t t g c t t g g c a g a g c t a t a a g c g t t a t g c a a t g g g a a a a c g a a c t c c g t c c 60
a c t a a c a a a a g a t g g c t a c g a g g t a a c a t g t t c g g a g g c c t c a g c g g g g c a a c a g t c a t 120
t g a c t c c c t c g a t a c c c t c t a c c t c a t g g a g c t g a a g g a g g a g t t c c a g g a g g c c a a g g c 180
c t g g g t g g g a g a g a g c t t c c a c t g a a c g t g a g c g g a g a a g c a t c c t t g t t g a g g t g a a 240
c a t c c g c t a c a t c g g g g g a c t c c t c t c a g c c t t c t a c c t g a c a g g a g a a g a g t g t t c c g 300
a a t a a a g g c c a t c a g g c t g g g a g a g a a g c t c c t g c c g g c g t t c a a c a c c c c a c g g g a a t 360
c c c a a a g g g c g t g g t g a g c t t c a a a a g t g g g a a c t g g g g c t g g g c c a c a g c c g g c a g c a g 420
c a g c a t c t t g g c g g a g t t t g g a t c c c t g c a c t t g g a a t t c t t a c a c c t c a c t g a a c t c t c 480
t g g c a a c c a g g t c t t c g c t g a a a a g g t c a g g a a c a t c c g c a a g g t c c t c a g g a a g w t c g a 540
a a a g c c c t t t g g c c t y t a c t c c a a c t k a g m c a t g g t g t t g c a a a c a g a t c c c c 593

<210> 626

<211> 2272

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2267)

<223> n equals a,t,g, or c

<400> 626

g c g g c a c g a g g c t g a c a c g g g a g g g t c c t c a g c t a a a g c c a a a g c a g a t c a a a g t g g t g 60
g g a c t c g c g t c g c g g c c g c g g a g a c g t c t c g a g g c t c c t c c c g c t g c g g g t c g g 120
c g c t c g c c c t c g t c t c c t c g c c c t c c g c c c g g c c c c g c g c c g c c a t g g a g a 180
a g a c t g a g c t g a t c c a g a a g g c c a a g c t g g c c g a g c a g g c g a g c g c t a c g a c g a c a t g g 240
c c a c c t g c a t g a a g g c a g t a c c g a g c a g g g c g c c g a g c t g t c c a a c a g a g a g c g a a c c 300
t g c t c t c c g t g g c c t a c a a g a a c g t g g t c g g g g c c g c a g t c c g c c t g g a g g g t c a t c t c 360
t a g c a t c g a g c a g a a g a c c g a c a c c t c c g a c a a g a a g t t g c a g c t g a t t a a g g a c t a t c g 420
g g a g a a a g t g g a g t c c g a g c t g a g a t c c a t c t g c a c c a c g g t g c t g g a a t t g t t g g a t a a 480
a t a t t t a a t a g c c a a t g c a a c t a a t c c a g a g a t a a g g t c t t c t a t c t g a a a t g a a g g g 540
t g a t t a c t t c c g g t a c c t t g c t g a a g t t g c g t g t g g t g a t g a t c g a a a a c a a a c g a t a g a 600
t a a t t c c c a a g g a g c t t a c c a a g a g g c a t t t g a t a t a a g c a a g a a a g a g a t g c a a c c c a c 660
a c a c c c a a t c c g c c t g g g g c t t g c t c t t a a c t t t c t g t a t t t a c t a t g a g a t t c t t a a 720

taaccacagag cttgcctgca cgctggctaa aacggctttt gatgaggcca ttgctgaact 780
tgatacactg aatgaagact catacaaaga cagcaccctc atcatgcagt tgcttagaga 840
caacctaaca ctttgacat cagacagtgc aggagaagaa tgtgatgagg cagaaggggc 900
tgaaaactaa atccatacag ggtgtcatcc ttctttcctt caagaaacct ttttacacat 960
ctccattcct tattccactt ggatttccta tagcaaagaa acccattcat gtgtatggaa 1020
tcaactggtt atagtctttt cacactgcag ctttgggaaa acttcattcc ttgatttgtg 1080
tttgtcttgg ccttcctggg gtgcagtact gctgtagaaa agtattaata gcttcatttc 1140
atataaacat aagtaactcc caaacactta tgtagaggac taaaaatgta tctggatttt 1200
aagtaatctg aaccagtctt gcaagtgcgt gtgttttgta ttactgtgaa aataagaaaa 1260
tgtagttaat tacaatttaa agagtattcc acataacttc ttaatttcta cattccctcc 1320
cttactcttc gggggtttcc tttcagtaag caacttttcc atgctcttaa tgtattcctt 1380
tttagtagga atccggaagt attagattga atggaaaagc acttgccatc tctgtctagg 1440
ggtcacaaat tgaaatggct cctgtatcac atacggagggt cttgtgtatc tgtggcaaca 1500
gggagtttcc ttattcactc ttattttgct gctgtttaag ttgccaacct cccctcccaa 1560
taaaaattca cttacacctc ctgcctttgt agttctggta ttactttac tatgtgatag 1620
aagtagcatg ttgctgccag aatacaagca ttgcttttgg caaattaaag tgcattgcat 1680
ttcttaatac actagaaagg ggaaataaat taaagtacac aagtccaagt ctaaaacttt 1740
agtacttttc catgcagatt tgtgcacatg tgagagggtg tccagtttgt ctagtgtattg 1800
ttatttagag agttggacca ctattgtgtg ttgctaatac ttgactgtag tccccaaaaa 1860
gccttgtgaa aatgttatgc cctatgtaac agcagagtaa cataaaataa aagtacattt 1920
tataaacat ttactatggc ttgttaacaa ttgcataccc atattttaag ggacagggtga 1980
atttactact ttctaaagtt tattgatact tcccttttat gtaaaatgta gtagtgatac 2040
ctatatattcc acattgtgca ttgtgacaca cttgtctagg gatgcctgga agtgataaaa 2100
attggactgc atttctttaga gtgttttact atagatcagt ctcatggggc atctcttcc 2160
cagatgtaaa tgatatctgg ttaagtgtta tatggaataa agtggacatt ttaaaactar 2220
maaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaanaaa ta 2272

<210> 627

<211> 871

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (863)

<223> n equals a,t,g, or c

<400> 627

gggagcggag gncaggaacc caataagctg cttgcctcgc gagctgaagc ccgtactcaa 60
gatggcggct ccgggcgggc gtggccagtg actagaaggc gaggcgccgc gggaccatgg 120
cggcgccggc ggacgagcgg agtccagagg acggagaaga cgaggaagag gaggagcagt 180
tggttctggt ggaattatca ggaattattg attcaractt cctctcaaaa tgtgaaaata 240
aatgcaagggt ttggggcatt gacactgaga ggccccattct gcaagtggac agctgtgtct 300
ttgctgggga gtatgaagac actctaggga cctgtgttat atttgaagaa aatgttgaac 360
atgctgatac agaaggcaat aataaaacag tgctaaaata taaatgccat acaatgaaga 420
agctcagcat gacaagaact ctccctgacag agaagaagga aggagaagaa aacatagggt 480

gggtggaatg gctgcaaata aaggataatg atttctccta tcgacccaac atgatttgta 540
actttctaca tgaaaatgaa gacgaagaag tggtagcttc agccccagat aaatctttgg 600
aattggaaga ggaagagatt caaatgaacg acagttcaaa cctgagttgt gaacaggaga 660
aaccaatgca cttggaaata gaagattctg gtcctcttat tgatatacct tctgagacag 720
aaggttctgt ttttatggaa actcaaatgc tgccttagaa atcactccta gatgaaatgt 780
ttctcataat aacttgtcaa gaacttttta gagttgttac ataaaaataa ttgctgtgta 840
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa t 871

<210> 628

<211> 779

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (23)

<223> n equals a,t,g, or c

<400> 628

ggcctggcag gaattcgggc agnggcccg ggccargatgg cagcggcgct gcgcgtgcgt 60
tggtgagtgt tcgggacgcc ggccctgcagg cgccatggtc ttcctcaccg cgcagctctg 120
gctgcggaat cgcgtcaccg accgctactt tcggatccag gaggtgctga agcacgccag 180
gcacttccgg ggaaggaaaa atcgtctgcta caggttggcg gtcagaaccg tgattcagagc 240
ctttgtgaaa tgcaccaaag cccgatacct gaagaaaaag aacatgagga ccctctggat 300
taatcgaatt acagctgcta gccaggaaca tggactgaag tatccagcgc tcattgggaa 360
tttagttaag tgccaggtag agctcaacag gaaagtccta gcggatctgg ccatctacga 420
gccaaagact ttcaaatctt tggctgcctt ggccagtagg aggcgacacg aaggatttgc 480
tgctgccttg ggggatggga aggaacctga aggcattttt tccagagtgg tgcagtacca 540
ctgaggactg ttgctgtatt gattaggaaa agagacagag taatttgcag tttgtttgat 600
ttatactttt gtttatctac aacccaataa cagacatgag ggatggccct gtctctctgg 660
gacagagcct cacagatgat gtccatgttt tgtgtgaatg aaactcaaac actcttcaaa 720
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 779

<210> 629

<211> 1835

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1835)

<223> n equals a,t,g, or c

<400> 629

gcggggccgt acgccgattc catatggggcg ccggcgcgga gcgccgcggg gcagcgcggg 60
gtcgccatgg ctgagctgca gcagctccgg gtgcaggagg cggtaggagtc catggtgaa 120
agtctggaaa gagagaacat ccggaagatg caggggtctca tgttccgggtg cagcgccagc 180
tgttgtgagg acagccaggc ctccatgaag caggtgcacc agtgcatcga gcgctgccat 240
gtgcctctgg ctcaagccca ggctttggtc accagtgagc tggagaagtt ccaggaccgc 300
ctggcccggt gcaccatgca ttgcaaygac aaagccaaag attcaataga tgctgggagt 360
aaggagcttc aggtgaagca gcagctggac agttgtgtga ccaagtgtgt ggatgaccac 420


```
atgcacctca tcccaactat gaccaagaag atgaaggagg ctctcttatac aattggaaaa 480
taaaagtatt tgccagtggc catcagggct gagggcaaga atatattttt tataaggaat 540
tgggaatttt agtcttttaa gcaaagttaa cgaatgaaga aatgaaggat ggccacaagc 600
gtaaggcata tgtcacttgc ctctggacac tggttatttt atgtttcagt ccctaaaaaa 660
tgaaatggaa aaaagtgggtg ctaaatcgag tcagagatat tacaggagag ttttagagct 720
tattatttcc tgtggccagt gcttgcctg gcagtaaggc tytcccctgt aacaagccag 780
agccctccaa ggtaccagac tcttcttact acacaggtag taacaggctg gcagggttaga 840
gttggtggag tctgaggaga gatattttct ctttgttgcc aacatcctgt ttacccaaaag 900
tgtcacccca ccattctcca taagctgtga aacaaaatca atgagggtcac taacttagaa 960
gggaaagaaa gttttctggg tctttgtttt cttgatttgg ggtaatttat acaagggcat 1020
acaagttagt ttttaagatgt ggaactggga ggtagactag tttggataag aactttgaaa 1080
tgttccttgt ggatcccat tcttggtcat caagatgtgg atgtacattt cttaaaatta 1140
ttacatgctg catctttcag cctggagact gtgcagaaac atgagagggtg atgacacact 1200
aattatggga agcagaatta ctggctgatg gcccctgagg ctgtgtgtaa caaatgaca 1260
ggacaatctt gcagtaacac tttccccttg aagagaaggg ggttttgatt gtgatatata 1320
ctagtatcta ggaatgaaca gtaaaagagg agcagttggc tacttgatta caacagagta 1380
aatgaagtac tggatttggg aaaacctggt tttatttaga catatggaat gaaagcctac 1440
acctagcatt gcctacttag cccctgaat taacagagcc caattgagac aaacctctg 1500
caacaggaaa ttcaaggag aaaaagtaag caacttgggc taggatgagc tgactccctt 1560
agagcaaagg agagacagcc ccattacca aataccattt ttgcctgggg cttgtgcagc 1620
tggcagtgtt cctgccccag catggcacct tattgttttg atagcaactt cgttgaattt 1680
tcaccaactt attacttgaa attataatat agcctgtccg tttgctgttt ccaggctgtg 1740
atatattttc ctagtgggtt gactttaaaa ataaataagg ttttaattttc tccccaaaaa 1800
aaaaaaaaa aaaaaaaaaa aaaaataaaa aaatn 1835
```

<210> 630

<211> 1097

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<400> 630

```
ggcttggatt ttngtttcct attagaaacc aacagttttg ttctaatttc atttcatttg 60
gagctaagat gactaatttg atgattttcg atctcttttc ccctgtcctg attttaaaag 120
ccccctcctt tttttttttt tttttttttt ctttttttag gcatatgtag taatattaga 180
aacatttaat ttgggaaact ttgattcttg aaagagaaaa caaaagcatg tgaataaact 240
ttgaagtgtt cacctcagtt tgggacccaa ctgcttggat ctttgtaaaa accgggtttg 300
tatgtcaagg aggagttaa ggcctttccg accaccttgt gttccccttt tctgcgcasc 360
atgtatcacg tggagtgtct ccttaccaca cctcacgtgc ccctgagccc tatttcctga 420
tttcttcttg gctggacttc cccgttctcc accagcagct ccagtatccc aaactttcta 480
gtcctgctga tcctcccagc aacggggtgg aaactggagg gcagtgtctg gtctgttttc 540
taagaaactt atgaattcta ttatctttac aaatatgaga aaattttttc aatatttttt 600
attaatcttt ttataaaatg aaaagaaact cctatgatcg attaaggaag gtggttatgg 660
ctgggtggtt caggggtttt tttgggtttc tttttttttt ctttgtcttt ttaaccttaa 720
gctgtttaag ttgaagcatt ctcagatgtt tggggggaaa catcctctta aaatgggtcc 780
ttgtgcttgc cttctgggga ggcggtcctg agcaggtgaa tcataaggca tttatgcata 840
tgttatatgc ggactgcacc cacctctccc cccagcctt tgccctcttg gttgttgtgc 900
```

tgctttcccc ttactttgct acatttctat agttaagttg gttttacttg aatgattcat 960
gtttagggggg aaaatgaaaa tctcccttaa aatttgtttc aactcctcct gcaaataaaa 1020
taaatagaagt ggcagatgta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080
aaaaaaaaaa aaaaaaa 1097

<210> 631

<211> 1537

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<400> 631

cagtnaccgg tccggaattc ccgggtcgac ccacgcgtcg cacggggaaa aggtggctct 60
ggccgggggtg gctcggtttc ctggggctat gtaactgagc tcgtcgactt aggggtcctt 120
cttcgctgcc ctccgcgcgt gctagcaggg agtttccgct cgggagagag actgtcctca 180
cgcccgtgc gcctcctcga cggcagagca ggcttgctcg ccggtgggag cgtcccggcc 240
gagaagccct gaggggggag gggagggcat tttgtcccga ccgactcccc ggaaccgggc 300
ggagcggctg ggagaggctg cggagccgcg gtcgcccgcg tcggaggcac tggacgccgc 360
cactgtcggg gcttcctcaa agctgttcgt aggtcgcccg cgcgctctcg agcctttttc 420
ccacgcttcc ccggtcctcc ggctgagaa cgcgcgagtg aggagtggc cgtagtgaga 480
gggaccgac ccttggggcc gccggcggcg agagcccgag ccgctcctcc caatggcgaa 540
gaagacgtac gacctgcttt tcaagctgct cctgatcggg gattccggag tggggaagac 600
ctgcgtcctt tttcgttttt cggatgatgc cttcaatact acctttattt ccaccatagg 660
aatagacttc aagatcaaaa cagttgaatt acaaggaaaag aagatcaagc tacagatatg 720
ggatacagca ggccaggagc gatttcacac catcacaacc tcctactaca gaggcgcaat 780
gggtatcatg ctagtatatg acatcaccaa tggtaaaagt tttgaaaaca tcagcaaatg 840
gcttagaaac atagatgagc atgccaatga agatgtggaa agaattgttac taggaaacaa 900
gtgtgatatg gacgacaaaa gagttgtacc taaaggaaaa ggagaacaga ttgcaaggga 960
gcatggattt aggttttttg agactagtgc aaaagcaaat ataaacatcg aaaaggcgtt 1020
cctcacgtta gctgaagata tccttcgaaa gacccctgta aaagagccca acagtgaaaa 1080
tgtagatatc agcagtggag gaggcgtgac aggtcggaag agcaaatgct gctgagcatt 1140
ctcctgttcc atcagttgcc atccactacc ccgttttctc ttcttgctgc aaaataaacc 1200
actctgtcca tttttaactc taaacagata tttttgtttc tcatcttaac tatccaagcc 1260
acctatttta tttgttcttt catctgtgac tgcttgctga ctttatcata attttcttca 1320
aacaacaaaa tgtatagaaa aatcatgtct gtgacttcat ttttaaatgt acttgctcag 1380
ctcaactgca tttcagttgt attatagtcc agttcttatc aacattaaaa cctatagcaa 1440
tcatttcaaa tctattctgc aaattgtata agaataaagt tagaattaac aatttaaaaa 1500
aaaaaaaaaa actcgagggg gggcccggt acccaac 1537

<210> 632

<211> 1901

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1566)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1894)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1899)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1900)

<223> n equals a,t,g, or c

<400> 632

```
ggcatccagt ttagcaacac cagagatgac gactctgcga ttctgagagt ccctggcgag 60
cccggggctag cgaaaagtgg gggcagaacg aactacatct cccatcgtgc caggaggcgg 120
tcccggccgt tccccctgg gagttgtagt ctaacccctt cggatccaac agcaacctca 180
gtgcggtgaac tctgttatcc agaaggcctc gccctgccgc cgccgaagct ggaattcgtc 240
ggctagtagt tctcgccggc aactagagga acctgttggc gtggcccaga aggcttagcg 300
ggattgcacg agccctcaga ttcacgcta ccccgaggct aagcgccatg cctcatattg 360
acaacgatgt gaaactggac ttcaaggatg tccttttgag gcccaaacgc agtaccctta 420
agtctcgaag tgaggtggat ctcaagat ccttttcatt tcggaactca aagcagacat 480
actctggggt tcccattcatt gctgccaata tggatactgt gggcaccttt gagatggcca 540
aggttctctg taagttctct ctcttcactg ctgtccataa gcactatagc ctcgttcagt 600
ggcaagagtt tgctggccag aatcctgact gtcttgagca tctggctgcc agctcaggca 660
caggctcttc tgactttgag cagctggaac agatcctgga agctattccc cagggtgaagt 720
atatatgcct ggatgtggca aatggctact ctgaacactt tgttgaattt gtaaaagatg 780
tacggaagcg cttccccag cacaccatca tggcagggaa tgtggttaaca ggagagatgg 840
tagaagagct catcctttct ggggctgaca tcatcaaagt gggaattggg ccaggctctg 900
tgtgtactac tcggaagaaa actggagtgg ggtatccaca gctcagcgca gtgatggagt 960
gtgcagatgc tgctcatggc ctcaaaggca catcatttca gatggagggt gcagctgtcc 1020
tggggatgtg gccaaaggct ttggggcagg agctgacttc gtgatgctgg gtggcatgct 1080
ggctgggcac agtgagtcag gtggtgagct catcgagagg gatggcaaga agtacaagct 1140
cttctatgga atgagttctg aaatggccat gaagaagtat gctgggggag tggctgagta 1200
cagagcctca gagggaaaga cagtggaggt tccttttaaa ggagatgtgg aacataccat 1260
ccgagacatc ctaggaggga tccgctctac gtgtacctat gtgggagcag ctaagctcaa 1320
agagttgagc aggagaacta cttcatccg agtcaccag caggatgaat caatcttcag 1380
tgaggcgtgc tagacctgag cagttctacc ctccaaggc accagtactc taccatgggg 1440
catcccaagt ggggtcctca cccatcccag ctactgcagc tctgtattac tttgtcattt 1500
cctgttgtct cactcctgag ggctcctgca gtaactctgt acttctctat ctgcacacac 1560
aaaatncca aggcactcac tggggaggaa gcaaggagc aaacagtctg agaaaatgat 1620
gcaagaaaat caaatgggaa tctggggacc caacacaaca tcctgaagat tattaagg 1680
aaaagatgct gattggtaca taaatctttt acatggcctt ggtctagagg aggagggctt 1740
ttagaatcat gttttgttaa tccgcttcac taaattggac cttcacatat ctaaaaagct 1800
ctgaagtgtt tgtatatttg aaatacctca ataaagagag agctcattga ctgtaaaaaa 1860
aaaaaaaaa aaaaaggggg gccgctttaa agnccaann t 1901
```

<210> 633
<211> 1750
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (809)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (821)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1676)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1689)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1712)
<223> n equals a,t,g, or c

<400> 633
gagacgacaa ccaccacctt atggcgccga aacgccaacg gggaccctgt ctgcaacgcc 60
tgtggcctct actacaagct gcacaatgtt aacaggccac tgaccatgaa gaaggaagg 120
atccagactc ggaaccggaa gatgtccaac aagtccaaga agagcaagaa aggggcggag 180
tgcttcgagg agctgtcaaa gtgcatgcag gagaagtcac ccccttcag tgcagctgcc 240
ctggctggac acatggcacc tgtgggccac ctcccgccct tcagccactc cggacacatc 300
ctgcccactc cgacgcccac ccaccctcc tccagcctct ccttcggcca cccccaccgc 360
tccagcatgg tgaccgccat gggctaggga acagatggac gtcgaggacc gggcactccc 420
gggatgggtg gaccaaacc ttagcagccc agcatttccc gaaggccgac accactcctg 480
ccagcccggc tcggcccagc acccctctc ctggaggcg cccagcagcc tgccagcagt 540
tactgtgaat gttccccacc gctgagaggc tgcctccgca cctgacygct gccaggtgg 600
ggtttcctgc atggacagtt gtttgagaa caacaaggac aactttatgt agagaaaagg 660
aggggacggg acagacgaag gcaaccattt ttagaaggaa aaaggattag gcaaaaataa 720
tttattttgc tcttgtttct aacaaggact tggagacttg gtggtctgag ctgtcccaag 780
tcctccggtt cttctcggg attggcgnt ccacttgcca nggctctggg ggcagatttg 840
tggggacctc agcctgcacc ctcttctcct ctggcttccc tctctgaaat agccgaactc 900
caggctgggc tgagccaaaag ccagagtgc acgcccagc gaggtgagc tgggtgcctgc 960
tttgacggsc cagcctggag ggcagagaca atcacgggc gtcctgcaca gattcmcagg 1020
ccagggtgg gtcacaggaa ggaacaaca tttcttgaa aggggaaacg tctcccagat 1080
cgctcccttg gctttgaggc cgaagctgct gtgactgtgt ccccttactg agcgcaagcc 1140
acagcctgtc ttgtcagggt gaccctgtaa atacatcctt tttctgctaa cccttcaacc 1200

ccctcgccctc ctactctgag acaaaagaaa aaatattaaa aaaatgcata ggcttaactc 1260
gctgatgagt taattgtttt atttttaaac tctttttggg tccagttgat tgtacgtagc 1320
cacaggagcc ctgctatgaa aggaataaaa cctacacaca aggttggagc tttgcaattc 1380
tttttggaag agagctggga tcccacagcc ctagtatgaa agctgggggt ggggaggggc 1440
ctttgctgcc cttggtttct gggggctggg tggcatttgc tggcctggca ggggggtgaag 1500
gcaggagttg ggggcaggtc aggaccagga cccagggara ggctgtgtcc ctgctggggg 1560
ctcagggtcca gctttactgt ggctgtcttg atccttccca aggtacagct gtattatyaa 1620
acgtkttccc gagcttaaga ttctgttatg cggtgacggc ggggttttgg ttggcgtttg 1680
aggggccent gccaggggag gaaggatttt gntgatgtaa gtgaccaagt gcaatattgg 1740
tccggcattc 1750

<210> 634

<211> 1926

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<400> 634

ggggcgcgcg canagatcgc gcacttctac ggccgcctct actccgagag ctcacgccgc 60
gttctcctcg gccgcctctg gcgccggctg cacggccgtc ctggccatgc ctctgccttg 120
atggcgcgct tagcgccgtc ttctgttggg acgaggagag gatccaggag gaggagtgc 180
agagatctat taatgagatg aagcggttgg aagaaatgtc aaatatgttt cagagctctg 240
gagtccagca ccaccctcca gaacaaaag cccaaacaga agggaatgaa gattcagagg 300
gcaaagagca acgttgggaa atggtgatgg ataagaaaca ctttaagctg tggcgccgcc 360
caattacagg caccacctt taccagtacc gagtttttgg aacctacaca gatgtgacac 420
ctcggcagtt cttcaatggt cagctggaca cagagtatag aaaaaaatgg gatgccctgg 480
taatcaagct ggaggtgatt gagagggatg tggttagtgg ttccgaggtt cttcactggg 540
taaccatttt tccttatcca atgtactcac gggattatgt ttatgttcgg cggatatagt 600
tggatcagga aaacaacatg atggtgttgg tgtcgcgtgc tgtggagcat ccgagtgtgc 660
cagagtctcc agaattcgtc agggtcagat catatgaatc ccaaattggt atccgtcccc 720
acaagtcatt tgatgagaat ggctttgact acttactaac atacagtgc aatcccaaaa 780
cgggtgttcc tcgctactgt gttagtggga tggtttccag tggcatgcca gatttccttg 840
agaagctgca catggccact ctgaaagcca agaatatgga gattaaagta aaggactaca 900
tctcagctaa gcctctggaa atgagtatg aagccaaggc caccagccag tcctctgagc 960
gaaagaacga gggcagctgt ggccctgctc ggattgagta tgcttgacag gctttgggat 1020
aagaaggagc aaggtgcttc tagccctgtc tcagtcctgt atcactctgc tgtagaaggg 1080
ggacatgcca catgtattag aaggcatctg ctgtaacttc cagtgcaga taattcaata 1140
actgatgtcc catttcattc agagccctta ttgctcttat caaacagaa gaaggctaca 1200
tttgtgggag tgttgcata ttctcaggcc aactgttttg aaattcggta tctcactgag 1260
ctaacttgga acaaacctct cacctcaggc cagaagggga tgacctccat ttgcttctct 1320
gagtagtttc ctctgctgac attccaaatc ccaccatcga ttgtgcagcg ctttggattt 1380
ccttcagttc tccaggtcca cctggaaagt atagtggcc agttgagtct ctcaaataag 1440
gggctactgg gagtgcctt ggtaacaatc atgatgtgaa tgggtgtgaa cgatacttgg 1500
ctatgttaag tgccctgtcc gcacctgtct tttatctcta gagacatgaa gttattatta 1560
atTTTTTTTT ttttaagta gagatggagt ttactctgt tccccaggct ggtcttgaac 1620
tcctgggcca tgccctggcca gggacatgaa tttgtacaaa gaaatttccc tcctgcctg 1680
cacaatatca ccattgact caccttatcc aaagcaagtt tcctgtgaat cggccagttc 1740

```

ttctatattc attggatcat tgccctcttc ctgaaccttc cccattttac caaggaacat 1800
ggggagacta atccttttta gatagtagct ttttgatgg ctcaaaacat cacatttta 1860
atttagtttt aaaaattttt taacttttgk gkcaaaaagg gggttgagga atttagcaag 1920
gatctt 1926

```

<210> 635

<211> 1346

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1342)

<223> n equals a,t,g, or c

<400> 635

```

ggctgcgaga agacgacana ngggggcttt tctctcgggt gatccggccg agtggccctg 60
ggtagcagc tgctgcattt ccccggtgg ctgcggtcac tgggtggcagt gctcaggcgc 120
ccgcgccctt gaccttcggc cccgcgagct ctaaccttac agcgcaggaa gatcggccgc 180
cgcgccagg ctctgatgct ggtgtctggt agaagaagg tactcacagt tctgtgcag 240
gctcagaagt ggcctttca accctccaga gacatgagac tagtgcagtt ccgggcaccc 300
cacctggtgg ggcctcactt gggcctggag acagggaatg gtggaggggt tatcaacctc 360
aatgcctttg accccacact cccgaagacg atgacgcagt tcctagagca gggagaggcc 420
accctctcag tggcaagaag agccctggct gccagttgc cagtcctacc acggtcggag 480
gtaaccttc tggctccagt cacaygrcca gataagggtg tgtgtgtggg catgaattat 540
gtggaccact gcaaagaaca gaacgtgccc gtgcccaagg agcccatcat cttcagcaag 600
tttgccagct ccacgtggg gccctatgat gaggtggtcc tcccaccaca gagccaggag 660
gtagattggg aagtggagct ggccgtggtc attggaaaga aaggcaagca catcaaggcc 720
acagatgcta tggcccacgt ggccggttc actgtggctc atgacgtgag tgctcgtgac 780
tggcwaayra gacgyaatgg gaaacartgg ctgctgggaa aaaccttcga caccttctgc 840
cctctgggcc ctgccttggg gaccaaggac agttagcag atccacacaa cttaaagatc 900
tgctgccgag tgaatgggga agtsgtccag agcrgcaaca ccaaccagat ggtattcaag 960
acagaggacc tgatagcctg ggtctcccag tttgttacct tttaccaggg ggatgtcatc 1020
ctaactggga cccccccagg tgtcgggtgta ttcaggaaac ctctgtctt tctcaagaag 1080
ggggatgaag tccagtgtga gattgaagaa ctagggtgta tcatcaacaa ggtggtgtga 1140
tggctcctgc acaggccctg cacataggat gagggcatct gctcccactc agcctagccc 1200
agggaaaagg ccagtgcag gtgtggacag gtgccagccc tgcaagccgc ctcttctcgg 1260
tagaagggag aaggacagag ctctcttcaa taaattcgtc aggtcaaagc armaaaaaaa 1320
aaaaaaaaaa aaaaaggggg gncccc 1346

```

<210> 636

<211> 1584

<212> DNA

<213> Homo sapiens

<400> 636

```
gcgggccgct actactacta ctactactaa attcgcggcc ggtcgacggg gagctgaatt 60
ccggaagatc cccacatcga tgaaagcaaa gcgaagcacc aagccatcat catgtccacg 120
tcgctacgag tcagcccatc catccatggc taccacttcg acacagcctc tcgtaagaaa 180
gccgtgggca acatctttga aaacacagac caagaatcac tagaaaggct cttcagaaac 240
tctggagaca agaaagcaga ggagagagcc aagatcattt ttgccataga tcaagatgtg 300
gaggagaaaa cgcgtgccct gatggccttg aagaagagga caaaagacaa gcttttccag 360
tttctgaaac tgcggaaata ttccatcaaa gttcactgaa gagaagagga tggataagga 420
cgttatccaa gaatggacat tcaaagacca agtgagtgtg tgagattcta acagatgcag 480
cattttgctg ctaccttaca agcttctctt ctgtcaggac tccagaggct ggaaagggac 540
cgggactgga aagggaccag gactgaacag actggttaca aagactccaa acaatttcat 600
gccctgtgct gttacagagg agaacaaaat gctttcagca aggatttgaa aactcttccg 660
tccttgcagg aaaggattga tgctgataka agagcctgga cagatgtaat gagaactaaa 720
gaaaaacagat ggctggagat gacatttatc cagggtcact ttgtcaggcc ctaggactta 780
aatcgaagtt gaactttttt ttttttttaa ccaaatagat aggggaaggg agggaggaga 840
gggaggacag ggagagaaaa taccatgcat aaattgttta ctgaattttt atatctgagt 900
gttcaaaaata tttccaagcc tgagtattgt ctattggtat agatttttag aaatcaataa 960
ttgattattt atttgcactt attacaatgc ctgaaaaagt gcaccacatg gatgttaagt 1020
agaaattcaa gaaagtaaga tgtcttcagc aactcagtaa aaccttacgc caccttttgg 1080
tttgtaaaag gttttttata catttcaaac aggttgcaca aaagttaaaa taatggggtc 1140
ttttataaat ccaaagtact gtgaaaacat ttacatatt ttttaaatct tctgactaat 1200
gctaaaacgt aatctaatta aatttcatac agttactgca gtaagcatta ggaagtgaat 1260
atgatataca aaatagttta taaagactct atagtttcta taatttttt tactggcaaa 1320
tgtcatgcaa caataataaa ttattgtaaa ctttgtggct tttggtctgt gatgcttggg 1380
ctcaaaggaa aaaataagat ggtaaagtgt gatatttaca aacttttcta aagatgtgtc 1440
tctamcaata aaagttaatt ttagagtagt tttatattaa ttaccaaact ttttcaaaac 1500
aaattcttac gtcaaatac tggaagttt ctctgtccca atcttaaaat ataaaaatata 1560
gatatagaag ttcaaaaaaa aaaa 1584
```

<210> 637

<211> 1663

<212> DNA

<213> Homo sapiens

<400> 637

```
ggctggaggc gccattggag ccggcttggc tggcgagccc ggctgaggag cctcttgggy 60
cgcacttacc gccgcgtccg ctcccgggcc ctggccccctc agcggcatgg cgtgcggggc 120
gacgctgaag cggcccatgg agttcgaggc ggcgctgctg agccccggct ccccgaggc 180
gcggcgctgc gccctctgc ccggccccac tccgggcctc agggcccccg acgcggagcc 240
gccgcggccg tttcagacgc agacccccacc gcagagtctg cagcagccccg ccccgccccg 300
cagcgagcgg cgccttccaa ctccggagca aatttttctc aacataaaac aagaatatag 360
tcgttatcag aggtggagac atttagaagt tgttcttaat cagagtgaag cttgtgcttc 420
ggaaagtcaa cctcactcct cagcactcac agcacctagc tctccagggt cctcatggat 480
gaagaaggac cagcccatc ttaccctccg acaagtggc ataatatgtg agcgcctctt 540
aaaagactat gaagataaaa ttcggggagga gtatgagcaa atcctcaata ccaaactagc 600
agaacaatat gaatcttttg tgaaattcac acatgatcag attatgcgac ggtatgggac 660
aaggccaaca agctatgtgt catgaagctt tgtcacatat ctgggtacca ggtttgacct 720
```

caagagatgg ctgctgtaca ctttttgcaa ctggtttgat gtcacatttc agctccaact 780
ttgcatcctg agaacactta aacgtttctg caggtccatt ttatacaact tgaaagaccg 840
taaaactttc tggttgccac aagcatatct ttcttttctg ctcaccaat aaacagctgt 900
gccctactgt gatagatttt ccaaacaaaa atacctggag cagcagttta gcaaaatatg 960
ccttcagtgg cattcaacaa atggagtttc cccaagcaca gttctgtaag aagtgcgtgt 1020
gagagtgtgt gtatatgtgt gtatgtgtat ttttaagttat ttttgtatt gtgcaaaaaat 1080
ttttttttga tcttggggat tctggctgtg aatttgggtc acgacaatta tggtaaaaaa 1140
acatttgctt ggtctaaaga agatcattaa tgttttgtga ccatacaagt tgtaacagtg 1200
gattgttttt atgtgtaggt attgttaaata acagggactg tttccaggca cagaatatga 1260
atcgtaagtt aggatggaca ttagatgtga ttatgatgat aaagcgaagg tctgcggtcc 1320
trtatctaca gacacgtggg gagaaattag aacaaactgg agacggggcca ttgacacatg 1380
gactctgcct gggcatgtta ggttaattct ttgactccaa gccttaaaat actcacatgg 1440
agtcagcgct cacctcattc acacaattat catagagctc cctggacact gaacctctaa 1500
agggaaaagg tctacctggg agccaggagc atcaggggtg gcttgggagc atgagagggtg 1560
agcccagggc taggcctggg ccaggccccg gcagcactgc tacttgggag gagccacttc 1620
acctttgtat tagttattaa aaattaattt gggctgggcg cag 1663

<210> 638

<211> 3947

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (625)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3738)

<223> n equals a,t,g, or c

<400> 638

cgcaggcggc gggaggccca ggagaagcgg tactactacg acctcgatga ctcttacgac 60
gagagcgatg aggaggaggt cagggccac ctccgttgcg tggccgagca gccgcccctc 120
aaactggaca cgtcctctga gaagctagag tttttgcaac tttttggctt gaccacccaa 180
cagcagaagg aggaattggg gggccagaag cggagggaagc ggcggaggat gctgcgagag 240
agaagcccgt cggccccaac aattcagagc aagcggcaga cgccttcacc gagactggcg 300
ctgtctaccc gctacagccc tgatgagatg aacaacagtc ccaacttcga agaaaagaag 360
aagttcctga ccattctcaa cctgaccac atcagcgctg agaagaggaa agacaaagag 420
agacttggtg aaatgctccg tgccatgaag cagaaggcac tgtcagcagc agtggccgac 480
tccttgacaa actctccgag ggacagtcct gccgtctccc tgagtgaacc agccacgcag 540
caagcctctc tggatgtgga gaagccgggt ggtgttgctg cttccttgct tgacatccca 600
aaggccgcgg acctgggaag ctggaacag gtccggcccc aggagctgtc gagagtccag 660
gagctagctc ctgccagcgg ggagaaaggc caggctgagc gaggcccctg gaggcaaaaa 720
gagtctgagc atgcttcaat atatccgggg cgctgcaccc aaggacattc ctgtgccgct 780
gtcccacagc accaatggga agagcaagcc gtgggagccc tttgtggcag aagagtttgc 840
acatcagttc cacgagttca gtgctgcagt ccacccagaa ggccctgcag aagcataaag 900
ggagcgtggc tgtgctgtct gcagagcaga accacaagggt tgacacgtcc gtccactaca 960
acattcctga gctgcagtcc tccagccgag ccctccacc ccagcacaat gggcagcagg 1020
agccccccac tgcaagggaag ggccccccaa cccaggaggt ggaccgggac tcggaggagg 1080

aggaagagga ggatgatgaa gatggagaag atgaggagga agtccccaag cgcaagtggc 1140
aagggatcga ggccgttttt gaagcttacc aggaacacat agaagagcaa aatctggagc 1200
ggcaggtgtt acagacacaa tgtagacgac tggaggcccg gcactacagc ctcagcctga 1260
cggcagagca gctctcccac agcgtggcgg agttgaggag ccagaaacag aagatggtct 1320
cagaacggga gcggtccag gcagaactgg accacttacg aaagtgcctt gccttgccctg 1380
caatgcactg gcctaggggc tacctgaagg gatatccag gtgacggtt cccttgcaact 1440
aggccgaacc tatagtatag aaatattatc tattttatta ccttgaatat ttaatatattt 1500
tacttgaggag gtttgaagct tacaaaatga gaatgtgcc aatgaagc aaaggattcc 1560
aggctccaga aaaaatgaat gaactcacct tgacgtcaat gcaattgaat caccgttgct 1620
attcagcgag caaccaatgt aggtatggcc acagtttttc tttttaaagg tggttttcgc 1680
ccttcctctc ccacattatt tcttaactctg aacatgaagg ctccattagc aacactaaaa 1740
cttgatcatt aacagccccc tgtgcatatg agtggatcaa accggttctg ttctttcttg 1800
tgttgccatg ttactatgcc tcaagcccag tttgcttttg cccagcgat ggggccagtc 1860
tcattcctcc ccaggagtga aacttgcttc agctgaaaag gttgggtgca tygtcagtaa 1920
aaagggctta tttgttcat tttactttcc tgcaaaaatt tcttcaaagc aacaagtcct 1980
agggtcacac aaagcaaccc aaaggctttt cctggaaaa gctctttctt acctaaagat 2040
aaaaccaatt cacaactga aggtagcttt ttattactcc gtggggagca tgtacagagc 2100
tctgtgtata cacagcttca caccaccag attgttacta cagtgggttg ggttttcata 2160
cagacgtaaa ttttgagaga aaagtcaaa gtgcttcagc ctgtactgt gtatatatat 2220
taaaaaaaaa acaaagtttt gtatgttttt attactttta ctattgttat aaaaagcctg 2280
ccatttttaa tatgtggttt gggggatttt tgttgtttt tcctgttttg ggttttgtt 2340
tgtgttttg gtttttttg ggcaaaaaa aaaaaaaac cttgctttta gtgtttgtac 2400
tgctgctggt caggacatta aaatattgaa gtgtttttta aaattaaaga agaagaaaag 2460
taaaagagct taccactggc gcctatgca tcacttcatt ttagtttgga gttgcaccag 2520
aagctgccgt agaaagccat gcgctactgc ttacctctc cactccccct gcctgcccc 2580
agcatctgga caagctaata gcaaatatta cccattgcta tcaagggagg aggggtagt 2640
ctgtagaacc catgtgtgac agtcatgtgc acacatgggc gggggctttt aaaaacctt 2700
caggaagtca atgatttctg tgattgatat aattctaagg tgtctgagag caggtacaga 2760
ataggaactt cagaggcttt gtttaaacgc aaagctttgt aaaagccaca aggtctgagc 2820
tgaacccctc ctttttgaac ttactgtgac aagcacagga acggtcagaa actgggtc 2880
tcacaccaag gcaaagcaac gggcgagtct tcctccttgt cctagttact gcctatggag 2940
gcagtgttta gatcaagaag gcctctcttg ctcccaaggg ccctcaccag aggccagggc 3000
tgccagtcac tggctgggg ggtggaggcc tgagctgagg gcagggtgcc tgacctgtgt 3060
gccggtgct cactgctgtg accagcagcc gagcccttg ccctagccct tgctgcgca 3120
aacagcttgc tggcagctgg catcgtgtcg ctttatctgc ccccgacag tttgctttgt 3180
acgtctgcca agaactcttc agttattagc aaactcagac gaatgtaccg ccagtattat 3240
cagcagtcga caagcacctt cctctccaca gaagcagctg gaagagaact cgaggggctg 3300
tgctgmaggc ctyccctcga aagacactgg gaggtcagca tgttccacag gtgttcagag 3360
ggagtctgct acaaaactatc agggcaaaat ctcactggaw ttctccactg aaaacctact 3420
tgaggtttct ggtctgaagg ctttaagagtc acatcttagc acttccgctc tcaggcctcc 3480
tcctccatca cagatgtctg gatgcttttg gaaatggcct tggctaaagt aaaagggaaa 3540
agtagatccg ataacttaaa aacgtagctc atcccttacc atccaagggg cactcccttg 3600
gttggtttt ctatgacagc acaggggaca ggtggcacac catgagaggt ctgcccaggg 3660
tgaggagcag tgcactgtgc tagcaatagt tggttctcc cctgtcagtg gaaacccac 3720
ttctgcccgg cccttgangc ttcttgccca ctgtctcccc atccttccac ctacttgttg 3780
cgatctgagt actctactct tgctcaagaa gtaatacgac aatcagaata caaacagta 3840
aggcaacacg aataaactaa gaaaaaggta agaactgtct caaaaacgaa accacacca 3900
cccaagaaca gggtttaaaa aaaaaaaaa aaaaaaaaa aaaaaaa 3947

<210> 639

<211> 1427

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<400> 639

```
caagcngana cnaccctcac taaaggganc aaaagctgga gctccaccgc ggtggcggcc 60
gctctagaac tagtggatcc cccgggctgc aggaattcgg cagagggcg gcggaactag 120
ccaggcctct gccggggcag cgactggcgc tactggggcc agcrgggcg gtggcccat 180
caaccggcc tcgctgcctc ccggcgaccc gcagctcatc gctctcatcg tggagcagct 240
caagagccgg ggctttttg acagcttccg ccgggactgc ctggccgacg tggacaccaa 300
gccagcttac caaacctga ggcagaaagt ggataatttt gtgtcaacac atctggacaa 360
gcaggaatgg aatcctacga tgaacaaaaa ccagttgcga aatggtctga ggcagagtgt 420
ggttcagtca gggatgttgg aagctggagt agacaggatt atttctcagg tggtagatcc 480
aaaacttaac cacatcttca ggccacaaat agaacgagca attcatgagt tcctggcggc 540
ccagaaaaaa gcagctgtgc cagcaccccc tccagagccc gaagccagga ccctccagct 600
ccatctcagg acacttccta agaatacgcc agacaccttt tgaaagctaa tttttggtga 660
agaaatggat tcggttacat aagagtgcaa cttcagactg aagataggcc aaggctcgtca 720
ctgatctcaa gatttcaacc ttgaccatgg gcagtgacca gattgaaagg ggagcaagtt 780
cggcagtggg agagttgacc gtgtcacccc ctgcattgtg ctgccatttg gccagcctgt 840
ccaagggcat gacaccaagt agacactaca gagagagaaa cactacagca acccagggtt 900
gtcctgaaac agacttttat acttgaacat ggagactgca catggacttt agggtttgtg 960
ctgtgggata aacggaagct acagtgagaa catagccagt cccaaagaca atttcaaaga 1020
aaaatgacag taaagattag ctgggagtag tctttgacag tgcttatattg atactgtctc 1080
tcagagtttg caaaccagat tgtacaagtc attagcgtca gatagcttta aagttgtgac 1140
cttctgttac atgaatcttc tagccagttt ctttctcttt gtaacgaaac atgaaatcct 1200
agaatgtatg agaagttcag acattaggca taaggaaact cgtttgacag ctctctgtcc 1260
agggtgctt cctgtcctgg aggggcccagt gagtcttagg tatgtttatt ttattctcac 1320
atttgtgttt ttttagaaaa gtgaatggtc aataaatggc ttatctttca taataaaatt 1380
atttgatact tttaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 1427
```

<210> 640

<211> 920

<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (910)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (919)
<223> n equals a,t,g, or c

<400> 640
gccacgcgt ccgccacgc gtccgccac gcgtccggtt cctgcttcgg agtcggcggt 60
ggtcgtccag accgagtgtt ctttactttt tgtttggttg aggtttcacg ctagaagggtg 120
gctcaggatg tcttcacac attttgccag tcgacacagg aaggatataa gtactgaaat 180
gattagaact aaaattgctc ataggaaatc actgtctcag aaagaaaata gacataagga 240
atacgaacga aatagacact ttggtttgaa agatgtaaac attccaacct tggaaggtag 300
aattcttggt gaattagatg agacatctca agggcttggt ccagaaaaga ccaatgttaa 360
gccaaaggca atgaaaacta ttctagggtga tcaacgaaaa cagatgctcc aaaaatacaa 420
agaagaaaag caacttcaaa aattgaaaga gcagagagag aaagctaaac gaggaatatt 480
taaagtgggt cgktatagac ctgatatgcc ttgktttctt ttatcaaacc agaattgctgt 540
gaaagctgag ccaaaaaagg ctattccatc ttctgtmcgg attacaaggt caaaggccaa 600
agaccaaagt gagcagacta agattgataa cgagagtgat gttcgagcaa tccgacctgg 660
tccaagacaa acttctgaaa agaaagtgtc agacaaagag aaaaaagtk tgcagcctgt 720
aatgcccacg tcgttgagaa tgactcgatc agctactcaa gcagcaaagc aggttcccag 780
aacagtctca tctaccacag caagaaagcc agtcacaaga gctgctaattg aaaacggaac 840
cagaaggaaa ggtgccaagt aaaggaagac actgccaaaa atgtagaaac aaaacccgac 900
agggtatttn ttgtaaagnc 920

<210> 641
<211> 1706
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1704)
<223> n equals a,t,g, or c

<400> 641
gccgcgcctc cgccgctttt tatagcggcc gcgggcgggc gcggcagcgg ttggagggttg 60
taggaccggc gaggaatagg aatcatggcg gctgcgctgt tcgtgctgct gggattcgcg 120
ctgctgggca cccacggagc ctccggggct gccggcacag tcttcactac cgtagaagac 180
cttggtctca agatactcct cactgtctcc ttgaatgaca gcgccacaga ggacacagg 240
caccgctggc tgaagggggg cgtggtgctg aaggaggacg cgctgcccgg ccagaaaacg 300
gagttcaagg tggactccga cgaccagtgg ggagagtact cctgcgtctt cctccccgag 360
ccatgggca cggccaacat ccagctccac gggcctccca gagtgaaggc tgtgaagtcg 420
tcagaacaca tcaacgaggg ggagacggcc atgctggtct gcaagtcaga gtccgtgcca 480
cctgtcactg actgggctg gtacaagatc actgactctg aggacaaggc cctcatgaac 540

```
ggctccgaga gcaggttctt cgtgagttcc tcgcagggcc ggtcagagct acacattgag 600
aacctgaaca tggaggccga ccccggccag taccggtgca acggcaccag ctccaagggc 660
tccgaccagg ccatcatcac gctccgcgtg cgcagccacc tggccgccct ctggcccttc 720
ctgggcatcg tggctgaggt gctggtgctg gtcaccatca tcttcatacta cgagaagcgc 780
cggaaagccc aggacgtcct ggatgatgac gacgccggct ctgcacccct gaagagcagc 840
gggcagcacc agaattgaaa aggcaagaac gtccgccaga ggaactcttc ctgaggcagg 900
tggcccgagg acgctccctg ctccrcgtct gcgcgccgc cggagtccac tcccagtgtc 960
tgcaagattc caagttctca cctcttaaag aaaaccacc ccgtagattc ccatcataca 1020
tttccttctt ttttaaaaaa gttgggtttt ctccattcag gattctgttc cttaggwttt 1080
tttccttctg aagtgtttca cgagagcccg ggagctgctg cctgcccgc ccgtctgtgg 1140
ctttcagcct ctgggtctga gtcattggccg ggtgggcggc acagccttct cactggccg 1200
gagtcagtgc caggtccttg ccctttgtgg aaagtcacag gtcacacgag gggcccctgt 1260
tcctgcctgt ctgaagccaa tgctgtctgg ttgcgccatt tttgtgctt tatgtttaat 1320
tttatgaggg ccacgggtct gtgttcgact cagcctcagg gacgactctg acctcttggc 1380
cacagaggac tcacttgccc acaccgaggg cgaccccgtc acagcctcaa gtcactcca 1440
agccccctcc ttgtctgtgc atccgggggc agctctggag ggggtttgct ggggaactgg 1500
cgccatcgcc gggactccag aaccgcagaa gcctcccag ctcacccctg gaggacggcc 1560
ggctctctat agcaccaggg ctcacgtggg aacccccctc ccaccaccg ccacaataaa 1620
gatcgcccc acctccacc tcaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1680
aaaaaaaaaa aaaaamgggg gggncc 1706
```

<210> 642

<211> 2170

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (406)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (811)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2150)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2154)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2155)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2170)

<223> n equals a,t,g, or c

<400> 642

```
actatctcat tcccaggccg agrcctggac aagtttatta aattttttgc cctcaagact 60
gtccaagtga ttgtccaggc tcggcttggt gaaaagattt gcactcgttc atcatcttct 120
ccaacgggtt cagattgggt caacttagca atcaaagaca tcccagaggt tacacatgaa 180
gcaaagaagg cactggcagg acagctgcct gcagtcggga ggtccatgtg tgtggagatt 240
tcacttaaga cttctgaggg agattccatg gagctggaaa tatggtgtct tgaaatgaat 300
gaaaagtgtg ataaagaaat caaagtttcc tacacggtgt acaacagact gtcattgctg 360
ctgaagtccc ttcttgctat aactagggtg acaccagcct ataggntctc caggaaacaa 420
gggcatgaat atgtcatatt atacaggata ttttttgagg aagttcagct gagggtgcta 480
ggagaaggct tccagacagt tcgtgtggg acagtgggca cccctgtggg caccatcact 540
ctttcttgtg cttacagaat taacttgcca ttcatgtcta ccaggcaatt tgagaggacc 600
ccacctatca tggggattat tattgatcac tttgtggacc gtccctatcc cagctcctct 660
cccatgcacc cctgcaatta cagaactgct ggtgaggaca ctggagtaat ataccctgt 720
gtagaagact ctcaagaagt gtgtaccacc tctttttcca cctccccacc atcccagctg 780
atggttcctg ggaaggaagg tggggtaccc nttgctccca accagcctgt ccatgggtacc 840
caggctgacc aggagagact ggcaacctgc accccttctg acagaaccca ctgtgctgcc 900
acaccctcca gtagtgagga tactgaaacc gtatcaaaca gcagtgaggg acgggcctcc 960
cctcacgatg tcttgagagc catctttgtc cgaaaagtgg gggcttttgt caacaaaccc 1020
attaaccagg tgaccctgac gagtttgat atacccttg ccatgtttgc tccaagaat 1080
ttggagctgg aggataccga tccaatggtg aatcctccag attccccaga gactgaatct 1140
cctctccagg gcagcctgca ctcatatgc tccagcgggg gcagcagtg caatacccat 1200
gatgactttg ttatgataga ctttaaacca gctttttcta aagatgacat tcttccgatg 1260
gacctgggga ctttctatcg ggagtttcag aaccacctc agctgagcag cctctccata 1320
gatattggag cacagtccat ggctgaagac ttggactcat taccagagaa gctggctgtg 1380
catgagaaga atgtccgcga gtttgatgcc tttgtgaaa ccctgcagta aaagtatcct 1440
tgagtcccag cagcaccccc tttttgtggc cccagggcat aagcagcctc ccatgcatca 1500
gctgtcccca cccctcatcc tgctctgagc caggtggaag ggaggctggc ttctcccatg 1560
gggacccaga agtccctact cttggacctc ctggagactc cgtggcggca gtcaagccca 1620
gtgccagtt ggagaagact cacgtgctgg ccttgagat gggaagaacc ttcgtacgaa 1680
aaagccctca gcagggccat ctgtgtgccc tgcccatcac caactgcttc ccaaggggtg 1740
catctgttc ctctgtgtc cggcctcctg cctgggcctg ccttgagct ggcccccttc 1800
ctgctgtgtg tcaccatcca ctgtttgaca ttccagctgg tggccaagag attggtgtgg 1860
aggcagaaag aggaaggaga cagtgccagg aggaagaagg aaggagtcct ttagctctct 1920
tcattgtccc ctttacttcc tgctatcttc ttctcctctt cttctctctc ttgctctat 1980
gcctgtatct ctggcaatat gacaggcctg cctacccaag atcagaactc caaaaccact 2040
cccacccctg aaggtcggga gggctgagc agccctgggt gctgcctgtg ctcaggctct 2100
cagctccatg ggaaataaaa atggcacctc gaaaaaaaaa aaaaaaaaaa cccnnggggg 2160
gggccccggn                                     2170
```

<210> 643

<211> 1712

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1664)

<223> n equals a,t,g, or c

<400> 643

```
taagggancca aaagctggtg ctccaccgcg gtggcgggcg ctctagaact agtggatccc 60
ccgggctgca ggaattcggc acgagtcctg gcgggtggtg carcagtgtt gaaactkggg 120
aacattgagt tcaagcccga atctcgagtg aatggtctag atgaaagcaa aatcaaagat 180
aaaaatgagt taaaagaaat ttgtgaattg accggcattg atcaatcagt tctagaacga 240
gcattcagtt tccgaacagt tgaggccaaa caggagaaaag tttcaactac actgaatgtg 300
gctcaggctt attatgcccg tgatgctctg gctaaaaacc tctacagcag gttgttttca 360
tgggttggtaa atcgaatcaa tgaaagcatt aaggcacaaa caaaagtgtg aaagaagggtc 420
atgggtgttc tggacattta tggctttgag attttcgagg acaacagctt tgagcagttc 480
attattaatt attgtaacga aaagctgcaa caaatcttca ttgaacttac tcttaaagaa 540
gagcaggagg agtatatacg ggaggwtata gaatggactc acattgacta cttcaataat 600
gctatcattt gtgacctaat agaaaaatac acaaattgaa tcctggccat gctggatgaa 660
gagtgcctca gacctggcac agtcactgat gagaccttct tagaaaagct gaaccaagta 720
tgtgccaccc accagcattt tgaaagcagg atgagcaagt gctctcgggt cctcaatgac 780
acgtctctgc ctcacagctg cttcaggatc cagcattatg ctggaaagggt gctgtaccag 840
gtggaaggat tcggtgacaa aaacaatgac cttmtctatc gagacctgtc ccaagccatg 900
tggaaggcca gccatgccct catcaagtct ttgttccccg aagggaatcc cgccaagatc 960
aacctgaaaa ggcctcctac agcaggctca cagttcaagg catccgtggc cactctgatg 1020
aaaaacctac agaccawgaa mccaactat attaggtgta tcaaaccgaa tgataaaaaa 1080
gcagcacaca tcttcaacga ggctctagtg tgatcatcaga tcaggtacct ggggcttttg 1140
gagaacgtcc gagtgcggag ggcaggctac gccttcaggc aggcctatga accttgccct 1200
gaaagataca aatgctttg taaacaaaca tggcctcatt ggaaaggacc agccagggtct 1260
ggtgtggagg tcctatttaa tgaattagaa attcccgtgg aagaatactc ctttggtaga 1320
tcaaagatat tcatccgaaa ccaaagaaca ttattcaaat tagaagacct gaggaagcaa 1380
cgcctggagg acttggccac tctcattcag aagatatatc gggggtggaa atgccgcaca 1440
cacttcctgc taatgaaaaa aagccaaatt gtgattgccg cctggtacag gagatatgcg 1500
caacaaaaga ggtaccagca gacaaagagt tccgccttag taattcagtc ttatatccgg 1560
ggttggaagg ctgaaaaaat tctgcgggaa ctgaagcatc aaaagcgctg taaggaagca 1620
gtcacgacca ttgctgcata ttggcatggg acccargywc swangaagaa tcaggaaatt 1680
cttcagagcc aatgctggaa aagaaaatct at 1712
```

<210> 644

<211> 1793

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (790)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1731)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1793)

<223> n equals a,t,g, or c

<400> 644

```
ccgggtcgcac ccacgcgtcc ggattcttgg cgccggagaa gaggcagggc caccctctct 60
ccacgtcaga gacctgactg tggagatggc ggctcagaag ataaacgagg ggctggaaca 120
cctcgccaaa gcagagaaat acctgaaaac tggtttttta aaatggaagc cagattatga 180
cagtgcgcgt tctgaatatg gaaaagcagc tgttgctttt aaaaatgcca aacagtgtga 240
gcaagcaaaa gatgcctgcc tgagggaagc tgttgcccat gaaaataata gggctctttt 300
tcatgtctgcc aaagcttatg agcaagctgg aatgatgttg aaggagatgc agaaactacc 360
agaggccggt cagctaattg agaaggccag catgatgtat ctagaaaacg gcaccccgaga 420
cacagcagcc atggctttgg agcgagctgg aaagcttata gaaaatgttg atccagagaa 480
ggctgtacag ttatatcaac agacagctaa tgtgtttgaa aatgaagaac gcttacgaca 540
ggcagttgaa ttactaggaa aagcctccag actactagta cgaggacgta ggtttgatga 600
ggcggcactc tctattcaga aagaaaaaaa tattttataag gaaattgaga attatccaac 660
ttgttataag aaaacaattg ctcaagtctt agttcatcta cacagaaatg actatgtagc 720
tgcagaaaga tgtgtccggg agagctatag catccctggg ttcaatggca gtgaagactg 780
tgctgcctn ggaacagctt cttgaagggt atgaccagca agaccaagat cagggtgtcag 840
atgtctgcaa ctcaccgctt ttcaagtaca tggacaatga ttatgctaag ctgggcctga 900
gtttggtggt tccaggaggg ggaatcaaga agaaatcacc tgcaacacca cagscaagcc 960
tgatggtgtc actgccacgg ctgctgatga agaggaagat gaatactcag gaggactatg 1020
ctagtatttt gcttgctgaa aagaaaaggg aaacaaagggt aaaatcctga catgccattt 1080
caaggacttg ggaatagatt agggatatcc gtacttcatt acagtcatga ttttgatcc 1140
taataaagac trgtttttag ttaccatctt cccaaatcac tcattgtatc cattacctgt 1200
gaagcatatc tttttcyttc cataagagct tttctaagac accagcagga attaacagaa 1260
aatgtactgt catgttttaa tacattgatt aaaaaatttg caagccaaat tatacataaa 1320
ttatgttcta aacaaaaggg gtaataagca taggtattct ctcttgga cttgtaagtt 1380
actgttagtg aattgttttt tacgtttcat ttaataattg ctgctaaagg tgatgtttac 1440
tgataaatca ttttaaaatt tttttgtttt gaaaagtaaa tttatcccc atgatgttag 1500
atacatttaa attattaagt cttttcagag atgagatggg gacaggaagt tttttgagc 1560
cttacaatat tatttagccc aataaaagat gcattgaagc tcttatatat tatgagtttg 1620
aaaaattttg aaggtagcat attgaagtga tctataaata tcttcagtcc tctctgaagt 1680
gtgggtattt cttctatcta aaaaatacat acagtgactg tcttcaaadc nacttggttc 1740
ttgaccaaata aggagctaata gggtaatgaa tacctttttg tttgtgtgtt tgn 1793
```

<210> 645

<211> 2679

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (21)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (24)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (124)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c

<400> 645
ccnaccagtt tgcagtggtg nacnagaacc agtttgtaag natttatgac cagagaaaat 60
gatgagaatg agaacaatgg agtactcaag aagttctgtc ctcacacccc tgggtgaacag 120
tgantccnaa ascaaacatc acctgtcttg tgtaacarcc caccgacggca cagagctccc 180
tggcccagtt acaatgatga agacatttac ctcttcaact cctctcacag tgatggggcc 240
cagtatgta agagatacaa gggccacaga aataatgcc aagtaaaagg cgtcaatttc 300
tatggcccca agagtgaagt tgtggtgagc ggtagtgaat gtgggcacat cttcctctgg 360
gagaaatcat cctgccagat tattcagttc atggaggggg acaaggaggc cgtggtaaac 420
tgtcttgagc cccaccctca cctgcctgtg ctggcaacca gtggcctaga ccatgatgtg 480
aagatctggg caccacagc tgaagcttc actgagctga cagggttaa agatgtgatt 540
aagaagaaca agcgggagcg kgatgaagat agcttgacc aaactgacct gtttgatagt 600
cacatgctgt ggttccttat gcatcacctg agacagagac gccatcaccg gcgctggcga 660
gaacctgggg ttggggccac agacgcggac tctgatgagt ctcccagctc ctcagacaca 720
tcggacgagg aggaggggcc tgaccgggtg cagtgcacgc catcttgagg cctcatacct 780
agggtgggca ggtgggggct gccaacctga tcctgcctgg gcaacccttt cctgtcccag 840
gccctacatt cagcagaaac gcactttgga ctttttgctt tagataaaa agagacatcc 900
caggagaagg acaaaccaga ggagtgaacc aacaaagagt acctaggaat gggagttgag 960
ccctggaatg gggctccatg gagaggtgca taggactcgg cagaaatggc ctctcccca 1020
agcctctttt tgagaggaga gggagccta ttttgtaaac tggtttgagg tagggaatgg 1080
ggtttctttt tctttaatct cccttgtttc ttgggctggg ggarggggtg ggggaacaac 1140
tggctattca gtaccaaggg gccagagtgg agggtaggag tgccactctc tctttggttt 1200
aggtttttga cttttcttc ctttgtttt taaaagtta tgacagttgg ccccccccc 1260
acccccagca accccatccc agaactctat tttcctggga agtccttaaa gcccttaacc 1320
atcccacact cttcactttc ctttccacct tattcattct ctgtacttac cacagtattt 1380
tgacttgat tacatatact tcaactctct ctcttcatcc catcaccccc taaatagggtc 1440
aggtagggga ggtgggaag aggtgggagg aggggcagaa gtgaagggaag aatagggaag 1500
atattacctc ttctgttatt tttttaagaa acattgtttg gtggcagcaa tctccctgtc 1560

cctatcactg ttagaggcct aattttatat ctataaatat attaaaaagc aagtcaaact 1620
tggatgtatc aaggtaaaat tattgtcaaa gtttaaatat ctatatattc tctgaatgca 1680
ataaagggac ttaagagtga acaagagtaa tgggtgtgaa gtgacacctg gggtcagttt 1740
acctctgtgt atggctacta gagattggga cttacctttt aggttttagg aggcttgaga 1800
atggaaggat cctcatttct gcccttcctg gttccctgct ttgggttagg ggttgggaaa 1860
aacaggaaat tcctctcagc tctgcctcag atctcctacc tctccttaag tctttagagg 1920
ggttccaagg atggctcttc taaccagagg ctggcctgtc tttaaaactt aactacttta 1980
gggtggtgcc accactgcag actattgtgg tactttgtga cagaagacat gtacacacac 2040
accacacaca tacatacaca ctctctcact ctgtctctct taccttttagc tgcttgatca 2100
ttaagccatc caacttcagc ccagttccct tctttataga agagtgaagg gaaagacttc 2160
ctgggtttga cttaaacctt gtccacctct tgatatttta ggattgagga ataagtcatt 2220
aatctaagga ctgattacag tggctggagc ttgggcactt gtcttatcac tggtcactga 2280
gtctgaaagt ccagctgaa ttcttgccct taagtgtctt tgctgctatt tttttgccc 2340
cagttccaca agatccaacc aagaattctg tatcctggga cagtcagatt cttctaaatc 2400
aggccaggaa ggaggggaaa agagtgagag aatggatttc ccagatactt cttcctcctg 2460
ccccttttcc cagcagctct gagaccagat gttggctgct gtacttactc cctgaggtag 2520
ggaatgtgtg gtgctcgagt ggtctgtgtt cctattgtct gtggggtgat aggggtggct 2580
aaaaaccatg cactctggaa tttgttgtat tttctccag taaagctttt cttctcccga 2640
maaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2679

<210> 646

<211> 832

<212> DNA

<213> Homo sapiens

<400> 646

ggcaactcat tgctctccat gtaaatgtaa tcaacagatg aagagaatat aattgctctg 60
cttttccact aaaactccat cttagtgaat tttaaattat ccagagatgt caaactgcca 120
aataaaaaata tttcagtagt ctttgcatca gcttaccttg taccagaaac atttccaatt 180
tactatcaaa ttatagtaac tgagcctgtg tgaagtatct catcattttc gaaaggaaca 240
ccttgtgtga tgccagtga cttttctaaa aaggggtgtga ggtagaggta aggtgagaga 300
ccatttcaga atgcactggt gtcacaaaag gtgatctggt tctttcttca gagatttcta 360
cggggataga aaatcgggag tctgccctca ttaatctgtg actccacctc ttgcatcaaa 420
tcaatatcta ttgtttgagc acttattgat taagaccttg catatgtctg tccattttga 480
tttgagatac aactttttgt gtgggttgaa tgacaaatca ctccaaacaa arctgggcac 540
agagaatcag ctaggagacc agttattcag ggtccatttc tcttgatgt aaaggagtcc 600
tgggtaaaaat gtggctgtaa cctaaaccaa ctagtccttg tgatttgttt ctgccctctg 660
tgtttcctgt tgtcaaatgc taagtgtgtg ttttgagtc atgaactaaa gcacaaaaag 720
atgcatgaga cattgtagtc atatgtctgg tgtgacactt tggagcaaaa accttgagc 780
ggtaaataaa aaatttccaa cagggaaaaa aaaaaaaaaa aaaaaaaaaa aa 832

<210> 647

<211> 1325

<212> DNA

<213> Homo sapiens

<400> 647

gcagcgggac gcaccatttc agttgtgttc ttggttcatt tcgtgtctcg gcgatgtttc 60
ctagagtctc gacgttccta cctcttcgcc ccctttcccg ccacctttg tcctctggaa 120
gcccgagac atcagcggct gcgattatgc tactactgt tcggcacgga acagtcaggt 180
accgcagttc agcgtgtgtg gcccgacaa aaaataacat ccaaagatat tttggcacta 240

acagtgtgat ctgtagcaag aaagataagc agtctgttcg aactgaggag acttccaagg 300
agacttcaga gagccaagac agtgaaaagg aaaatacgaa aaaagacttg ttaggcatta 360
ttaaggcat gaaagttgaa ttaagcacag taaatgtacg aacaacaaag ccccccaaaa 420
gaagaccact taaaagtttg gaagctacac ttggcaggct tcgaagagct acagaatatg 480
ctccaaagaa gagaattgag cccctgagtc ctgagttggt ggcagctgca tctgctgttg 540
cagattctct cccttttgat aagcaaacia ccaagtcaga gctgctgagc cagctccagc 600
agcatgagga agagtcaagg gcacagagag atgcaaagcg acctaaaatt agtttcagta 660
acataatatc agatatgaaa gttgccagat ctgctacagc tagagttcgt tcaagaccag 720
agcttcggat tcagtttgat gaaggctatg acaattatcc tggccaggag aagacggatg 780
atcttaaaaa aaggaaaaat atattcacag ggaaaagact taatattttt gacatgatgg 840
cagttactaa agaagcacct gaaacagaca catcaccttc actttggrat gtggaatttg 900
ctaagcagtt agccacagta aatgaacaac cccttcagaa tggatttgaa gagctgatcc 960
agtggacaaa agaggggaaa ctatgggagt tcccaattaa caatgaagca ggttttgatg 1020
atgatggttc agaatttcat gaacatatat ttctggagaa acacctggag agctttccaa 1080
aacaaggacc aattcgccac ttcattggagc tgggtgactg tggcctttcc aaaaacccat 1140
atcttagtgt taaacagaag gttgaacaca tagagtgggt tagaaattat tttaatgaaa 1200
aaaaggatat tctaaaagaa agtaacatac agttcaatta agaccatgga aatttttatt 1260
tcaaacaatt agagatggat attacaacta aataaaataa ttttactaga aaaaaaaaaa 1320
aaaaa 1325

<210> 648

<211> 606

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (572)

<223> n equals a,t,g, or c

<400> 648

ttgcagctat acaaaatatt taaaatctca agtattcacc ctagatagag ttattatcta 60
agcattttat cttatccatc tcaaaaagaa aagaaaagaa gactctgacc tgtactcttg 120
aatacaagtt tctgatacca ctgcactgtc tgagaatttc caaaacttta atgaactaac 180
tgacagcttc atgaaactgt ccaccaagat caagcagaga aaataattaa ttcatggga 240
ctaaatgaac taatgaggat aatattttca taatttttta tttgaaattt tgctgattct 300
ttaaattgtc tgtttcccag atttcaggaa actttttttc ttttaagcta tccacagctt 360
acagcaattt gataaaatat acttttgatg acaaaaattg agacatttac attttctccc 420
tatgtggtcg ctccagactt gggaaactat tcatgaatat ttatatgta tggtaataata 480
gttattgcac aagttcaata aaaatctgct ctttgattra cagaawamaa aaacattggk 540
tatattacca aaacttttga ctagaatgtc gnatttgagg atataaaccc ataggtaata 600
aaccce 606

<210> 649

<211> 1696

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1047)

<223> n equals a,t,g, or c

<400> 649

```
gggagaactg agggtcctcc ttcccaacac acacacgcac acgccttctc ctaccacagc 60
aagtgaagaa tctcacttct tctctcctgg cttccacaga ggatgaaacc aggcattcct 120
tgccctaagg agaagaggga gagggatgtg agagtagtgg gtgggtggg aggccagggc 180
ttgggaaata agtgggagag acccagcatg ccctgcggcc actgtgcaag cagcaccag 240
tgcccccttc ctcccccagg cccagcgagg agatggtgaa gatggtgctg agccggccct 300
gccatcctga cgaccagttc accaccagca tcctgcggca ctggtgcatg aaacatgacg 360
agctgctggc cgagcacatc aagtccctgc tcatcaagaa caacagcctg cctcgcaaga 420
gacagagcct gaggagctct agcagcaagc tgccccagct gactctggag cagatcctgg 480
agcacttgga caatctgcgg ctcaacctga ccaacaccaa gcagaacttt tttagccaga 540
cgccaattct ccaggcgctg cagcatgtcc aagcgagctg tgacgaagcc cacaagatga 600
aattcagtga tctcttctcc ctggcggagg aatatgagga ctcttcacc aagccacca 660
agagccggcg aaaagcagct ctgtccagcc ctgcaagtcg aaagaatgcc acacagcccc 720
ccaatgccga agaagagtcg ggctccagca gtgcttcaga agaggaagac acgaaaccga 780
agcctaccaa gcggaacga aaagggtcct ctgcagtggg ctctgacagt gactgaggcc 840
ctgcattccc catcccacc ccggctggac tgccctctcc ttcttggtga ttcaaaggtt 900
aatagaggct gaggagattg caggggaaac acccttgctg catccccaag ctcccccggt 960
ggaaggagga gcttctcct ctggctgagt ttgagaagct gccatgcagc ccctagcccc 1020
ttccctctc ctggggcctc cagcccntca cactgctgtt ccagtgata tttgggatct 1080
gactgaagcc agaggctctg taaaatcaga ccatagtgga agtcctcagc cccctggccc 1140
cttcgcgaat ctctccccc agtctcccaa agagccattt caacagagaa gggaaatgac 1200
aaaggggcag ctggccagat aagctaggat gagagcagag actcagtgtg tgggtgtccc 1260
ttcctgcttc cccttcaggt cttggttgt tctgaaggga cgttttatag tcactatcca 1320
catgccagtg tgaaatgggc atctatgacg tggctcagggt gtccattcct aatcatgggg 1380
cagatgccac aagcattcag aaaggagtct gaaagggtgg ccacagcccc acgtggtgtg 1440
ccctggaggc ttaggttggt ctgaggttg cacctcaatc tacaccagag cccaggagg 1500
cccagaggca agtttcacag aattgtcaaa tgatccatt tccttgagkc tgtttttttt 1560
tttggttttt tttgtttttt ttttggcaga gataatcgtg tcttaaaagt tgttttttaa 1620
tgacaataaa acaagccaga atgtcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1680
aaaaaaaaaa aaaaaa 1696
```

<210> 650

<211> 3059

<212> DNA

<213> Homo sapiens

<400> 650

```
atttcaaaga gaatcccaac ctccagagata actggaccga tgcagaaggc tattatcgtg 60
tgaacatagg tgaagtccta gataaacgtt acaatgtgta tggctacact gggcaagggtg 120
tattcagtaa tgttgtagca gccagagata atgcaagagc caaccaagaa gtggctgtaa 180
agatcatcag aaacaatgag ctcatgcaaa agactggttt aaaagaatta gagttcttga 240
aaaaacttaa tgatgctgat cctgatgaca aatttcattg tctgagactc ttcaggcact 300
tctatcacia gcagcatctt tgtctggat tcgagcctct cagcatgaac ttacgagagg 360
tggttaaaaa atatggtaaa gatgttggtc ttcatattaa agctgtaaga tcctatagtc 420
agcagttggt cctggcattg aaactcctta aaagatgcat atcctacatg cagatatcaa 480
gccagacaac atcctgggta atgaatccaa aactatttta aagctttgcr attttgggtc 540
ggcttcacat gttgcggata atgacataac accttatctt gtcagtagat tttatcgtgc 600
tcctgaaatc attataggta aaagctatga ctatggtata gatatgtggt ctgtagggtg 660
caccttatac gaactctata ctggaaaaat tttattccct ggcaaaacca ataaccatat 720
```

gctgaagctt gcaatggatc tcaaaggaaa gatgccaaat aagatgattc gaaaagggtgt 780
gttcaaagat cagcattttg atcaaaatct caacttcatg tacatagaag ttgataaagt 840
aacagagagg gagaaagtta ctgttatgag caccattaat ccaactaagg acctgttggc 900
tgacttgatt ggggtgccaga gacttcctga agaccaacgt aagaaagtac accagctaaa 960
ggacttgttg gaccagattc tgatgttgga cccagctaaa cgaattagca tcaaccaggc 1020
cctacagcac gccttcatcc aggaaaaaat ttaaacaaga tgaagaaact ccaagggttt 1080
gagtaaatac aaagactgaa gaaatttcac agcagtttat taatgtatat aaacttataa 1140
atatttctcc agcaaatgtg aggaagcatg atatatttga attaacacca aggggtgatat 1200
ttcttttaga gatgttagtt aatctgtttt gtgtccttacg tgaaatttca ctgttagactg 1260
ttttaaattg ccaagactgc acaaaattac agtgctaattg tatatggttg cagttcacat 1320
aaagacaaaa gcatctgtta tgaaatgagt agtaattattg ggtggttgat ttgttcttag 1380
cagacttggc ttcatttttg tcttgagata aaatggccag cataaatgct gtttatattc 1440
acgttttccct aggtgtgtgt gtgcaggcca cagcagcatg cccttggtgt agtcagtgc 1500
gaaaggggtc tgctccttct tgagcctgcc tgcagggatg gtctcctttt aaagcagggt 1560
gtgtgcagca ttcagtacac tgaaggtaaag ctaaaccatc aacatctctg gtgttttaaag 1620
atgttatttt attggaacaa ctgacaaatg agggatgtta gctttgtggc agaattccct 1680
gcatgtgtga taactgatct tgttttattt ttgtgcattg caactgtggc atagttaaca 1740
ttctgttttg ttcatcacat ttaaaattgg aagagaacgc gcttgatgga tagagcgct 1800
tcagtgtact gtttcttatt aactttactt tttttaaatc aacttgctat agactttata 1860
tacattttgt taaatatagt tcctagtgc atagaacga tgcgtagttt tcatttacta 1920
attacaaatg ttgaggccta attctgaaag tcctcatatt taaaggctag acaacgtaat 1980
gaaattttta actatttcta tgtcattttg aaagtgtact gctttatggt aaaagtgttt 2040
ttcatttgtt cattgttttc attatttgtg atcatgttgt ctttcaatac aggcataaac 2100
cttcactct tgaacaaagc agctgctttt taaaagcggg aattgcttct ttacctttta 2160
tttcttttgt aaatgaagct tttctttaag aatgtgactt taaagtgttg tctattgcat 2220
aaaacagttg aacttcactt attgtaaagt gaagattgtt ctactgcatg tgaagtggac 2280
catgcagatt tctgtatgtt ctcagtatgc atcactagat aataaagtct tttgtgaaca 2340
aggcatttgt agccattttt aaaagttttt gtcttcagtg ctggttaagtc aggtaaacca 2400
taaatagtta aaagcaacct tttgtttttt tcctgaaagt ttttaattga agtattatt 2460
agttaaagat gtaaacctag ccaaaattac cagtttatta ataattagga tcctaattat 2520
ttcaaaaaat cctacaaata ttgtcagctt tcagtgtagt gagattattc ctgtaggtta 2580
tggggtataa ttcaggattt aactaatgtt tctgctattt tctcactttt ccttttgatg 2640
gtgcggaaaag agaaaaagga aaacggggca caggccattc gacgccttct ccaaggggtc 2700
tgatttgctg agacaccagc ttcaccttct taacaaggca cctaattaca acaagcatgc 2760
acatttttgt gcattcaaga atggaaaatc agaatagcag cattgattct tctggtgcag 2820
ctcagtggaa gatgatgaca accagaagac atgagctaag ggtaaggagc tgttctgaag 2880
aacctttcca tttagtatc aagatatgga agctgatttc tgaaaatgct cagtgtgtac 2940
tctaattatt tatggtacca tttgaattgt aacttgcat ttagcagtgc atgtttctaa 3000
ttgacttact gggaaactga ataaaatatg cctcttatta tcaaaaaaaa aaaaaaagg 3059

<210> 651

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 651

ggccaggcga accggctccc gagcagggtc ctgaagatgc tgagcgctca caccgggtcac 60
ctcctgcaac ctccactact gcttgaccct gccgggatcc cccaccagc ccttccccac 120
cggactgtgt atttatttac tataatgtta gcttacaagc tgggaatata agtgcattaa 180
cggcccatat gagtcaatgg tatgcaaaaa gtctgtgttc tcccaataa taatattaat 240
cccacaaata acgacatgat ccccgccctt gttcctttct gttatttttt cttagatata 300

```
agttttacat tttt wattcc ttttcctctt tttttggttt tgattggttt ggtttgaggg 360
agagttgggg tctttgggtt cttctagacg ttttggtttc ctttcctggg gagtttcttg 420
catgagtctt aacttaaaac tacgtttccg ctttctcttt ttccctcttc ccccttcatt 480
ccctcttggt tccttccatt tgcggttctg tttttgtttt ttgttttggt ttgttttggt 540
ttttcctttg ttgtacaagt aacagagagg aggttttttt tgtaactcat tttgggggtg 600
gagggggcca cctgggtssa gggggccctg agctctattg acctggtaca ctgctccggg 660
actcctcccc cgccaccctc cgcgcatagg gtccttggtc tggaccctgc cccccaaaag 720
tagggccttg ctctcttacc ttgctctgag cacggagagc cctgaccca ccagtaggct 780
cgcccyaga agggcccaag tgggcgtcta ccgtcacctt ccagactccc gcccctaaca 840
cccagtggtt acagtgcgc tgctggggca cctggagcgc tcacctggtt gaattcaaag 900
tcccagaagg ccccgctggc gtgaagccgg ccccttacat tttgcgaagt gcattatagt 960
ccttggtttt ctctccctcg tgggggcaac gaccctccc ctggcagtag ggggtgggta 1020
gggtgacttc gctagatccc tccaaagcag accggtggcg atgtcagcgg atgtcacgag 1080
ctcgtagct cggttcgggg aaggttgggg cgctaggagg ctctcggtc acagcagccc 1140
ccgccccttc ctaggcctgg ccgcagagc cccagagtg gacccccag cgactggggt 1200
cttctcccca ctctccctc cttctggtc tagtgcggcg cgcgggggtc gcggggcctg 1260
tttgggacga acagagctct cccttggtta gacttatttt gtttaataaat ggaataactg 1320
gctatattca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agtcga 1366
```

<210> 652

<211> 1425

<212> DNA

<213> Homo sapiens

<400> 652

```
aacgaggtaa aaacaaaaac cacgaaagca cacacaaaat aaatcagtgg gatttggtta 60
tgtgttttag agtaagaaat ttcaggttgt tgggtgactat cccaacagtc atgtttttaa 120
tgtacagttt ggggcaagtc atgtaaatac tgttggtggt cttccccaca cgccccatt 180
ttcaggtagt actaagagta tgtgccagga aactcttgct attgaattga gatgattaaa 240
atggtgactt aatccgtagt tattttgcac ccactgaaag gaaagtgctt tccagaataa 300
tatgaagtat ctaaaagtgt caccctttct tgcctgatca acaatttggg ctctctgttt 360
gtacaagggg ccatttgga tacctttcac agcttttatc aggccaagtt aaaggctgac 420
tacatttttt catcatgagg aaagcagttg aaatgaggca tgagtactg tgcattggga 480
ttttagaaca attttcttgt gacagctctt tttgtgaagt taggttctta aaagtgcca 540
tgatggtcac ttaaaatgtg cagtaatagc actgccagga tcaagcatga aaggctttta 600
aattagatca tcccacagac aatacgtttg ataatagttt tttcttttaa cctctttaag 660
tattgattct gcttgagaat attgaagtac ttgccagaag ttgtggattt cagttttaac 720
aatgctatt aaagtggaga agcacactct ggtcttgga ttccatttga ggatttagaa 780
gtgtcatgtt tataactatt cagtttgtgt ttgtgctggc ttgttgtaaa gcaataaaat 840
ttttttggtc tttttgtaag tgagtgtgct gctgtaagaa atctcccatg tgcataacaa 900
attctgaata ttttttgagg ctaaaagaaga ccgggggtgac aagcagatac tgctgtgtaa 960
tggttacact aaccaaaga caccagccac tcagagttct atactgtaaa gcgcagataa 1020
catttggtg ttataccttg attggggaat taaaagtcatt ttaactgaag atgttgagaa 1080
acctgggctc tggttttagt ataccggrat tacytttttc caattttagr aaatcmagcm 1140
ggktagrgra aatagagatg aattagggga cactgtctta tggattcatt tataagaaga 1200
gaaccagcca tatacacttg gggagatttg ccacatctta aacttgaata atagtatgag 1260
taatgcttaa gggagtttaa tagagaagga aagctttggc agtgttttga gaacttaagt 1320
ggctaaarag atgagacaaa catgcaggtc gctactggca tagtttcata attgtgkact 1380
cggaaattaa agtttgcttg tttcttggtc tggaaaaaaa aaaaa 1425
```

<210> 653

<211> 614

<212> DNA

<213> Homo sapiens

<400> 653

```
aagaggtatt tttcatcaat tctccccttc tctgctcttc tccctttcta ataccataag 60
gcagttcttc gtgactttta cagaaacata tgtacacgtc cttacagagt ttaggagagc 120
ctgtgggctt tttgccttag tctgctagaa agactggcct gctgctctct gctttatcca 180
gaggtctgcc tctgggactt cagccctgta gctgtagaga ccagaagacc aaccctcttt 240
gagaccacaga tgctactttc ccttgctgcc cctctctctt cctctcccaa tgagccaacc 300
ttttgcactt ccactagaat gccaggcagg ctgggcccc aaaggctcct ttttcaaaac 360
ctctggaagc cgcggttgaa tgtgccatga cctctccct ctctggatgg caccatcatt 420
gaagctggcg tcacgcgagt ctcttgttct gttggcgtgc tacctggaag atccttctgt 480
cctggacaag aggaattgga agagcathtt atgttttaag aacaggctga cagcagcag 540
ctacaacaac agctgagatc acttaataaa tgggtgctaa ctaaaaaaaaa aaaaaaaaaa 600
aaaaaaaaaa aaaa                                     614
```

<210> 654

<211> 2812

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (158)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (294)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2651)

<223> n equals a,t,g, or c

<400> 654

```
tttttttttt tttttttttt tttttttttt tggtttcatg gtctgattta ttgggtggtga 60
atacacaggg gcaggcccag gacaagcagc ttggctactc cccctctgct ggctgcccga 120
ccggcagagg gggctccatg tggcaggagc taggctcnca acgcccactg ttcttgccac 180
cctctgggct cccaggetgg gctccgctag gctcctgtct cccctgccag ttagtttagc 240
aagttcagggt gtggaggccg cagggataga tccagggtggc tctgggctgg gccntcttct 300
cttcccagcg gggaggtgct gttggcctgg ctgggctggc ctgaatctgt ttcaagttct 360
cccttcctgc ccagctcagt tcaccagtgc tggatccagg ttcaaagac agggacttgg 420
gtttttacaa cagcgtggca agtggctctgt ctccctggga gccatatccc agaccactg 480
ggttgaaggt tctgtggggt ggagggaccc caaggtgttc caagccagt gctgcaactg 540
cagcaggcct ctgagaggga ggcggaagg gtaggcgcgg agagcaggct ccattctggg 600
tcgagtggag gactggctcc cagggtagt tcacaccagt gctcccagct ggcggtgct 660
cagtcctctc tgctgggcga gcgcgggggg ccggggctat gccatgctgc tgggtggagca 720
gggggtgctc tgggtgctcc cgatgctgtg gttggtgctg ctgctctccg aggaggccgg 780
```

ggcagccacc gccaccacgg gctccccgtt gctgggggaa cgcgtgtgcg agtagatgta 840
ccagagtgcg gcagtgcgca gggccccgat gaggaaggca ccaaagggtga tgcccagcac 900
ggcgggcagg acgaggcctt tgcttgtgca accagacagg tcagggtctga tgatgttcaa 960
gcgcatgaag acagtcctat ggacttcctg gtcttgagac ccggtcttgg gacgcagggc 1020
taccgtgcag ctgaggggtgc cgggttttggg tatgggtact gtgtagaagt ggaggaggaa 1080
gctgaagcgc gggtcaccct cgggggttgg ggacagcagg ctcacacagt tgcccttggc 1140
cgcccggccc tggatgagtt ccacgggtgcc tccctcaggc cccaagtcca ggtggcagct 1200
gtctaactgg agcaggaact cggagacgga tggggacact ctgacctgca caaagctctg 1260
ctctgcccgc kgccaccgct gcccagagccc gacgctatgt ccagcaaagg ctccgtggtt 1320
ctggccctaca gtggcgccct ggacacctcg tgcacctcg tgtggctgaa ggaacaaggc 1380
tatgacgtca ttgcctatct ggccaacatt ggccagaagg aagacttcga ggaagccagg 1440
aagaaggcac tgaagcttgg ggccaaaaag gtgttcattg aggatgtcag cagggagttt 1500
gtggaggagt tcatctggcc ggccatccag tccagcgac tgtatgagga ccgctacctc 1560
ctgggcacct ctcttgccag gccctgcatc gcccgcaaac aagtggaaat cgcccagcgg 1620
gagggggcca agtatgtgtc ccacggcgcc acaggaaaag ggaacgatca ggtccggttt 1680
gagctcagct gctactcact ggccccccag ataaagggtca ttgctccctg gaggatgcct 1740
gaattctaca accggttcaa gggccgcaat gacctgatgg agtacgaaa gcaacacggg 1800
attcccatcc cggtcactcc caagaaccgg tggagcatgg atgagaacct catgcacatc 1860
agctacgagg ctggaatcct ggagaacccc aagaaccaag cgcctccagg tctctacacg 1920
aagaccagg acccagccaa agcccccaac acccctgaca ttctcgagat cgagttcaaa 1980
aaaggggtcc ctgtgaagggt gaccaacgtc aaggatggca ccaccacca gacctccttg 2040
gagctcttca tgtacctgaa cgaagtcgcg ggcaagcatg gcgtgggccg tattgacatc 2100
gtggagaacc gcttcatttg aatgaagtcc cgaggatatc acgagacccc agcaggcacc 2160
atcctttacc atgctcattt agacatcgag gccttcacca tggaccggga agtgcgcaaa 2220
atcaacaag gcctgggctt gaaatttgct gagctggtgt ataccggttt ctggcacagc 2280
cctgagtggt aatttgccg ccactgcatc gccaagtccc aggagcgagt ggaagggaaa 2340
gtgcaggtgt ccgtcctcaa gggccagggtg tacatcctcg gccgggagtc cccactgtct 2400
ctctacaatg aggagctggt gagcatgaac gtgcagggtg attatgagcc aactgatgcc 2460
accgggttca tcaacatcaa ttccctcagg ctgaaggaa atcatcgtct ccagagcaag 2520
gtcactgcca aatagaccgg tgtacaatga ggagctgggg cctcctcaat ttgcagatcc 2580
cccaagtaca ggcgctaatt gttgtgataa tttgtaattg tgacttgttc tccccggctg 2640
gcagcgtagt ngggctgcca ggcccagct ttgttccctg gtccccctga agcctgcaaa 2700
cgttgtcatc gaagggaaag gtggggggca gctgcggtgg ggagctataa aaatgacaat 2760
taaaagagac actagtcttt tatttctaaa aaaaaaaaaa aggaaaagag at 2812

<210> 655

<211> 1997

<212> DNA

<213> Homo sapiens

<400> 655

ttcggcacga gccaatctt cctccccctc ccggccaaga tgtctgacat ggaggatgat 60
ttcatgtgcg atgatgagga ggactacgac ctggaatact ctgaagatag taactccgag 120
ccaaatgtgg atttgaaaa tcagtactat aattccaaag cattaaaaga agatgaccca 180
aaagcggcat taagcagttt ccaaaagggt ttggaacttg aagggtgaaa aggagaatgg 240
ggattttaaag cactgaaaca aatgattaag attaaacttca agttgacaaa ctttccagaa 300
atgatgaata gatataagca gctattgacc tatattcgga gtgcagtcac aagaaattat 360
tctgaaaaat ccattaattc tattcttgat tatatctcta cttctaaaca gatggattta 420
ctgcaggaat cctatgaaac aacactggaa gctttgaaag atgctaagaa tgatagactg 480
tggtttaaga caaacacaaa gcttgaaaaa ttatatattg aacgagagga atatggaaag 540
cttcaaaaaa ttttacgcca gttacatcag tcgtgccaga ctgatgatgg agaagatgat 600

```

ctgaaaaaag gtacacagtt attagaaata tatgctttgg aaattcaaatt gtacacagca 660
cagaaaaata acaaaaaaact taaagcactc tatgaacagt cacttcacat caagtctgcc 720
atccctcatc cactgattat gggagttatc agagaatgtg gtggtaaaat gcacttgagg 780
gaagggtgaat ttgaaaaggc acacactgat ttttttgaa ccttcaagaa ttatgatgaa 840
tctggaagtc caagacgaac cacttgctta aaatatttgg tcttagcaaa tatgcttatg 900
aaatcgggaa taaatccatt tgactcacag gaggccaagc cgtacaaaaa tgatccagaa 960
attttagcaa tgacgaattt agtaagtgcc tatcagaata atgacatcac tgaatttgaa 1020
aagattctaa aaacaaatca cagcaacatc atggatgatc ctttcataag agaacacatt 1080
gaagagcttt tgcgaaacat cagaacacaa gtgcttataa aattaattaa gccttacaca 1140
agaatacata ttccttttat ttctaaggag ttaaatacag atgtagctga tgtggagagc 1200
ttgctgggtc agtgcataatt ggataacact attcatggcc gaattgatca agtcaacca 1260
ctccttgaac tggatcatca gaagaggggt ggtgcacgat atactgcact agataaatgg 1320
accaaccaac taaattctct caaccaggct gtagtcagta aactggctta acagagaaca 1380
agcttttaca gacgtcctta aggcaacagt gcagagatgt aatccttaaa agaactggga 1440
atggcaaaac tactgtcggg tgatgtgtcc tgaataattat tggagtattg gcagaagtgc 1500
ttttttgatc aactggtttg tgttttgctg ctgcatttat cccaagaaaa acagctttta 1560
tctccagaag aaaacaaaaa taccatggga tttatgctgt attgacatct tgccctaaac 1620
gtacaacatc atagtaattt gtcattggca acatgaccag agagaagatt tttgtcatga 1680
ttttaaatat actgacacgc tactgttggg taaatttaaa catgttttac ctgcagaaat 1740
tctctcacia ataactgca ataactgaa atgcataccc ttttgaacac ttccttttct 1800
catgtataaa ttaaaatgtt tgctgcattt tgcaaaatgt caattctcta aaaatgtgtc 1860
cgtatatttc tgtacctgca gtgtagtaaa ggttttagac aaaccccata attatagtgg 1920
catactgtca cttaggtttc aagcagcaaa ataaacagtg cagctcagaa aaaaaaaaaa 1980
aaaaaaaaa aaaaaaa 1997

```

<210> 656

<211> 1597

<212> DNA

<213> Homo sapiens

<400> 656

```

gctagtcctt cggcgagcga gcaccttcga cgcggtccgg ggacccctc gtcgctgtcc 60
tcccagcgcg gaccgcgctg cccagggcct cgcgctgccc ggccggctcc tcgtgtccca 120
ctcccgccgc acgccctccc gcgagtcctc ggccctccc gcgcccctct tctcggcgcg 180
cgcgcagcat ggcgcccccg caggtcctcg cgttcgggct tctgcttgcc gcggcgacgg 240
cgacttttgc cgcagctcag gaagaatgtg tctgtgaaaa ctacaagctg gccgtaaact 300
gctttgtgaa taataatcgt caatgccagt gtacttcagt tgggtgcaca aatactgtca 360
tttgctcaaa gctggctgcc aaatgtttgg tgatgaaggc agaaatgaat ggctcaaaac 420
ttgggagaa agcaaaacct gaaggggccc tccagaacaa tgatgggctt tatgatcctg 480
actgcgatga gagcgggctc ttttaaggcca agcagtgcaa cggcacctcc aygtgctggt 540
gtgtgaacac tgctggggctc agaagaacag acaaggacac tgaataaacc tgctctgagc 600
gagtgaacac ctactggatc atcattgaac taaaacacaa agcaagagaa aaaccttatg 660
atagtaaaag tttgcggact gcacttcaga aggagatcac aacgcgttat caactggatc 720
caaaatttat cacgagtatt ttgtatgaga ataattgtat cactattgat ctggttcaaa 780
attcttctca aaaaactcag aatgatgtgg acatagctga tgtggcttat tattttgaaa 840
aagatgttaa agtgtaatcc ttgtttcatt ctaagaaaat ggacctgaca gtaaatgggg 900
aacaactgga tctggatcct ggtcaaactt taatttatta tgttgatgaa aaagcacctg 960
aattctcaat gcagggctca aaagctgggt ttattgctgt tattgtggtt gtggtgatag 1020
cagttgttgc tggaaattgt gtgctgggta ttccagaaa gaagagaatg gcaaagtatg 1080
agaaggctga gataaaggag atgggtgaga tgcataggga actcaatgca taactatata 1140
atgtgaagat tataagaaga gggaaatagc aaatggacac aaattacaaa tgtgtgtgctg 1200

```



```
tgggacgaag acatctttga aggtcatgag tttgttagtt taacatcata tatttgtaat 1260
agtgaaacct gtactcaaaa tataagcagc ttgaaactgg ctttaccaat cttgaaattt 1320
gaccacaagt gtcttatata tgcagatcta atgtaaaatc cagaacttgg actccatcgt 1380
taaaattatt tatgtgtaac attcaaattgt gtgcattaaa tatgcttcca cagtaaaatc 1440
tgaaaaactg atttgtgatt gaaagctgcc tttctattta cttgagtctt gtacatacat 1500
acttttttat gagctatgaa ataaaacatt ttaaactgaa aaaaaaaaaa aaaaaaaaaa 1560
agtcgacgcc aggaatttag tagtagtagt aggcggc 1597
```

<210> 657

<211> 372

<212> DNA

<213> Homo sapiens

<400> 657

```
gcttggcctc gcccgcaaca cctcctgga ggatgctggg gagaggcagg gaccaggggt 60
cggctcccggt ctcgggccta tcgttaggcg ctggggcccc aggcctctcc tttgcagagt 120
ctcgtgacct cctcgcagcg agagccttca agcgcgcgag tccccgacgg cttccccgcg 180
ggccccactg tctccccaag acgcctggcg aggcgcgcgg ggctggagga ggcgctgagc 240
gcgctggggc tgcagggaga acgcgatacg ccggggacat cttcgccgaa gtcattgkct 300
gggtcaagag aaaggcgaa gcacagtgtt ggagagtga gcgctccctgc cccaaaccca 360
agttttccgc gt 372
```

<210> 658

<211> 1226

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (378)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1220)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1226)

<223> n equals a,t,g, or c

<400> 658

```
agcaaccctc taagacgcac tgcaccatgt gtagtggcca tcagagaggg gatgtgagtr 60
ggaggaaaagg ggtctgtaaa gcgggagaac aaggctagcc tccccctaac aatcctagac 120
tgagacgcag tcaggcgac ggcgcaagag gcggcgaggt gacaagtgtt gagtgcgcc 180
ccttcagtag tgcgcgttct aagacttttg gcggagactt tcttggcaaa acccattccc 240
caaagctacg cttcccctgc tgagatagcc cctaccccca cctccacagg ctgggacagc 300
ccgtccccac catcctcctc ccaagccaat taaatgatca cagcacgcgt gacagttacc 360
ggctggagag ccaggtgngg accgggagca ggggaccgta gaaccgggcc gcgctcctcc 420
cctcctagag ttcgtggagg gcgagcagag ggccgtccct cttccggatg tcggactaag 480
```

cgaacagcgc cccactgcc ggccggtagc agccggaagt gccagaccgg aggtgcgtca 540
ttcaccggcg acgccgatac ggttcctcca ccgaggccca tgcgaagctt tccactatgg 600
cttccagcac tgtcccgggtg agcgtgctg gctcggctaa tgaaactccc gaaataccgg 660
acaacgtggg agattggctt cggggcgctt accgctttgc cactgatagg aatgacttcc 720
ggaggaaactt gatactaaat ttgggactct ttgctgcggg agtttggctg gccaggaact 780
tgagtgcacat tgacctcatg gcacctcagc caggggtgta gccagtaga caaatggaat 840
cctgtgctga acccgaatct tccaaaaaac agcctacaat ctgtgaccac cacaagatgt 900
gccctgatgg cagctgaagt ttgattcaga tgggcacttt tcttcccctt ccctgcctag 960
tttccttttg ttccttgagt ccacgcagaa ttccattctc tggtcagcag acaggcttaa 1020
gctaaagtat tgaccttatt ctgtaaagtt ctgtacatag ttcccaagct tctgcagggg 1080
gtgatttttg ctcttgctct gagaaataac agtgctgttt taaaaaacat ttgaaataaa 1140
taccgcacac aaaggcaaaa aaaaaaaaaa gsgggccggg tttagaagat ccaaagctta 1200
cgtaccctg catgcgaagn cattan 1226

<210> 659

<211> 464

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<400> 659

cagacgcacc tactatggga aaacntggaa ctgccngcgc aggtacctgg tccggaattc 60
ccgggtcgac ccacgcgtcc gggcggaactg gggaggcggc ggcctggctc ggcctggcct 120
ggcctgtcag ggcgcgggag gcggcggtct cagcaccatg tccctgcagt acggggcgga 180
ggagacgccc ctgcgcggga gttacggcgc ggccgattcg tttccaaagg acttcggcta 240
cggcgtggag gaggaggaag aggaggcggc ggcggcgggc ggaggggttg gggcaggggc 300
aggcgggtggc tgtggtccgg ggggcgctga cagctccaag ccgaggattc tgctcatggg 360
gactccggcg caggscaaat tcctccatcc agaaagtggg gtttccataa agatgttcaa 420
ccaacgagac cctctttttt tgggaaatta ccaaacaaga tttt 464

<210> 660

<211> 2549

<212> DNA

<213> Homo sapiens

<400> 660

gcaaagaatg tgagaggagc tccagtgggt tcaggatgac ctgcctaggg acagagaagc 60
caggggttacc actctgaggg ctggaggagc ccttggtaca aaagcaccat ctgtaacctc 120
tgagcagctg aacgtgtatg agcacagaac acaccttctt ttctccgtaa ctttatgcac 180
tacctgtcc ctctgctagg agtgctctgc ccggcctctt tctcaccttt acacctgtct 240
tcttatcctc acatctgttt tcacaccttc atccctgtct tcctcatgtt cacactgtgc 300
ttcccatgt tcatagctgc ctttcttacc attttggttt gaagggcagt cttctctggc 360

ttgttttttt gtttttccca gaaaatcagt attatttttt aaataagaaa aacattccta 420
gaagatgawa attgtgaaaa cctccttttg cttattttgct tttccagatt ttagtctcct 480
ttctcccat cggggaaga tgggtgaaga cataggctaa atttctccag cctcacaatg 540
gtcttctactt ggtctgactt gtaccaattc tagcacccac tgaaaaacaa gttgagtaga 600
gagtgtagag tgcagaaatg tggcttttgc cccactttgc atctccaaaa ttacaacggt 660
tggccgatcc catttgagga caatgcttag ttataagtct ccgagttgga aaaggaagaa 720
agccagagct gtctagtttc attcattctt tcagtaaata tttattgagt acctactgtg 780
tgctaggcat tgacctggga actagaacta gagatacttc acagaataac agggaaagtt 840
ccctgtgctc atggagctta cattctacag ggagaaagag atagccaata cataggaata 900
aatatataca aggtatcatg tagtgataat tgctgtggag aaaaaataag caggggaggg 960
agtaagaaat cctggagatg aggtgcaggt tttaaattgg gcctcactgg gaatgtgacg 1020
ttgagcagag acgttaggga agtggatcct kgacaaggcm ttccaggcag aggaacagga 1080
tgtgactgc cccaaagtga gaacttgctc tacgtggtca ggaagagca gggagacca 1140
gcagagtcgt gggcaggggt agaattgaaag gagaggcggc tggirgaggac aggtggtgga 1200
gggccttggc ttctgctaag tgagatggga accactggag ggtttgaaca gaggagtgcc 1260
ttgattgatt tatattttgc aagggtcatt ctactgcca tattgtgaaa aacttttagtg 1320
gacaagggca gaaggaagag ggaagacctg ttaggaaagt actgcaagggt tccaggcttg 1380
ggcctgggccc acagcaacag cagtggctca atacttagat ttattttgaa aagagccaat 1440
aggatttgct gagagtttga atgtggagtg taagaraagg aagagttaat gatgacatta 1500
aggttttttg cctgaatagc aggaaagatg gagttaccag ttactgaaat aggggaaggat 1560
gggctgggta agtawggaat ttggtgcaaa gcaggctgtc tgtggttga atgggaggtt 1620
ctggctgcaa atcaaagtgg agagtctctc caggctcagg ctgcagcaga gctcgagaca 1680
gggatctgaa tgcaacttgg ttattgttgg ggggtgctctc agaaggaacc tgtgaaagcc 1740
tttatcagtc atttattggc tgtgagaagt tctctgggag tgtgggtaca tttgaaggca 1800
agtgaactta gttgagggca agtctctgga aaagaggctg taggcactct gcagctacca 1860
tgcatggtag tgtgttgggg gtgggggtcc tgggcactgg ctgtgtgaag ggatctggca 1920
gggcaccaca gcgcccccta ctgaaccatc agcatgtcag tggcatttaa agccatgcag 1980
ctggaggggc cactgagatt gtctctgagt attactgaga agcaacagaa aagagccatg 2040
gatggagccc ttgggtctctc tgggaaatgg gaaatcagcc aaaggactga gaaggagtta 2100
ccttaagggtc agagaaaacc aagagagtgt ggtgttcttg aagctgagct ttctttattc 2160
aacctcattc ctttctccaa ataagccact tgtgtagtgt ggccccctca gggttgaagg 2220
caagaggaga aaggcacagc gtttgggaaa caagactttt cctgcaatag cctgggaagg 2280
aataaaagga tagagtgttt ggggttttgt gtaatggtgg ttaattgggg tggaaactc 2340
acacgttggt ctttctctgg gcttccctta tccccagaa cactctacca acctcgggga 2400
actcgggcac atccttctgt ttctccttca gctctatcct gcttctctca tcccttctga 2460
caccacgtcc tcactcacct gcacaagaat ccctgcatca gggtctcctt tgaggggtacc 2520
caccaggac agtcccctac cacttctgt 2549

<210> 661

<211> 1162

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1155)

<223> n equals a,t,g, or c

<400> 661

ggcgctcgg agccgcggg gacgctcgg ggggacctg gctgargcg cggcggcgac 60
gtgggctgcg gcgggcccgc ggcgtcgggc ggtgcggatg tcgggctggg cggacgagcg 120

cggcgccgag ggcgacgggc gcatctacgt ggggaacctt ccgaccgacg tgcgcgagaa 180
ggacttggag gacctgttct acaagtacgg ccgcatccgc gagatcgagc tcaagaaccg 240
gcacggcctc gtgcccttcg ccttcgtgcg cttcgaggac ccccgagatg cagaggatgc 300
tatttatgga agaaatggtt atgattatgg ccagtgtcgg cttcgtgtgg agttccccag 360
gacttatgga ggtcgggggtg ggtggccccg tgggtgggag aatgggcctc ctacaagaag 420
atctgatttc cgagttcttg tttcaggact tcctccgtca ggcagctggc aggacctgaa 480
ggatcacatg cgagaagctg gggatgtctg ttatgctgat gtgcagaagg atggagtggg 540
gatggtcgag tatctcagaa aagaagacat ggaatatgcc ctgcgtaaac tggatgacac 600
caaattccgc tctcatgagg gtgaaacttc ctacatccga gtttatcctg agagaagcac 660
cagctatggc tactcacggt ctcggtctgg gtcaaggggc cgtgactctc cataccaaag 720
caggggttcc ccacactact tctctccttt caggccctac tgagacaggc gatgggaatt 780
ttttctttat tttttaggtt aactgagctg ctttgtgctc agaactctaca ttccagattg 840
aggatttagt gtcttaggaa atttttttaa tttttttttt ttaaagaaga aaaaaacta 900
cataatttct accagggccca tattagcagt gaaacatttt aaactgcaga aattgtgggt 960
ttggttcaga aacaagttgt atatttttca ccctgatta tgggaaaaaa atcagttctg 1020
tctttgtggg ttgcttact atggagatca acagtactg tgactgagtc ggccattct 1080
gtttagaaat atatttttaa tgtttagtaa aaaaaaaaaa aaaaaaaaaa aaaaaggggg 1140
gcccccaaaa ggggnccaag ct 1162

<210> 662

<211> 1178

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (978)

<223> n equals a,t,g, or c

<400> 662

gccccgcgcc gccgcgccgc ccgccatgga gcccggcccc gacggccccg ccgcctccgg 60
ccccgccgcc atccgcgagg gctggttccg cgagacctgc agcctgtggc ccggccaggc 120
cctgtcgtcg caggtggagc agctgctcca ccaccggcgc tcgcgctacc aggacatcct 180
cgtcttccgc agtaagacct atggcaacgt gctggtgttg gacggtgtca tccagtgcac 240
ggagagagac gagttctcct accaggagat gatcgccaac ctgcctctct gcagccaccc 300
caaccgcga aaggtgctga tcatcggggg cggagatgga ggtgtcctgc gggagggtgg 360
gaagcacccc tccgtggagt ccgtggtcca gtgtgagatc gacgaggatg tcatccaagt 420
ctccaagaag ttcttgccag gcatggccat tggctactct agctcgaagc tgaccctaca 480
tgtgggtgac ggttttgagt tcatgaaaca gaatcaggat gccttcgacg tgatcatcac 540
tgactcctca gaccccatgg gccccgcga aagtctcttc aaggagtcct attaccagct 600
catgaagaca gccctcaagg aagatggtgt cctctgctgc cagggcgagt gccagtggct 660
gcacctggac tcatcaagg agatgcggca gttctgccag tccctgttcc ccgtggtggc 720
ctatgcctac tgcaccatcc ccacctaccc cagcggccag atcggcttca tgctgtgcag 780
caagaacccg agcacgaact tccaggagcc ggtgcagccg ctgacacagc agcagggtggc 840
gcagatgcag ctgaagtact acaactccga cgtgcaccgc gccgcctttg tgctgcccga 900
gtttgcccgc aaggccctga atgatgtgag ctgagcccag gcgccaccac tgatgccacc 960
caggacctac cttggagnct gcggggtgct cggcccttcc agccaagtgt tacaagcccc 1020
agaatgctgc ccggcctgcc tgctgggcgg actgtctgtg tgtctgtctc tctggcgttc 1080
cacctccaag cctataccag ctgtgtacag cgccatctct ctgccttctg ttgcccctca 1140
mtyaccaaac acgtgtatatt atwgccaaaa aaaaaaaaa 1178

<210> 663
<211> 740
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (546)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (618)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (639)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (652)
<223> n equals a,t,g, or c

<400> 663
ggcccgctcc tagaacctag tgganccccc cgggctgcag gaattcgcca gcgtctgggc 60
gggtggtagg aacaatggcg ctgtcttaag tggcacagtg gagcagctct gaagatgcaa 120
agatacacga aaaaacttcc agaacatctg ggagaatatt taatggaaaa tcgcttggtt 180
aaaacctgac acttttaaca gtgaacagcg ttctgagtgt ggacgagtag ccagtgaaga 240
taatgaatgt cgaatgtgac tgactagcag cttcatcttg aatgagggtc gctgtctgcc 300
cattgataga ggccagattg tcttggaagt tccaaagttg caacgatttc tggctagtgc 360
cacgaggttt acttgactgt tgtgtgaaaa gctgataaga aaaccatcca gaaaaagct 420
cttcgtttta caaacatgaa aataaaacat gtaatttttg attatgttcc tttttgttat 480
tactttttaa taggtcctga aataacatgg ggagcattaa atggaaaatc cactaaccag 540
cttgtntcaa attactgtga gtgaatgttt ccgggtttgt gcaagggtaca tgtaagggtt 600
ttgggtcaat ggtaagantg gagagacaag aattagaant aatgttacta ancaaatcaa 660
gggatattaa ttttgagta acataatttg aaagcctgga tgctaagttg agaaatgggg 720
gaatgagatc agaaattagg 740

<210> 664
<211> 1670
<212> DNA
<213> Homo sapiens

<400> 664

```

ggcacagcag tctccttcca caaaaccatg gcgtcgctca aatgtagcac cgtcgtctgc 60
gtgatctgct tggagaagcc caaataccgc tgtccagcct gccgcgtgcc ctaaacagtgc 120
caaccctgaa actcgtcctg ttgagaaaaa aataagatca gctcttccta ccaaaaccgt 180
aaagcctgtg gaaaacaaag atgatgatga ctctatagct gattttctca atagtgatga 240
ggaagaagac agagtttctt tgcagaattt aaagaattta ggggaatctg caacattaaag 300
aagcttattg ctcaatccac acctcaggca gttgatggtc aacctcgatc agggagaaga 360
caaagcaaag ctcatgagag cttacatgca agagcctttg tttgtggagt ttgcagactg 420
ctgttttaga attgtggagc catcccagaa tgaggagtct taagatggat tattgtgctg 480
cttgctcaag cgtgtgcttg actcctggaa cctgcctgct ccctctccca gaccagctag 540
tttggggctg gggagctcag gcaaaagagg tttccaggat gcagattagg tcatgcaggc 600
ctttaccggc attgatgtgg ctcatgtttc aggcagactt ggggtcctta aggtggcaag 660
tcctttatgg agagaaaact tgacattcag atgattgttt ttaaattgtt tacttttggg 720
acagttgata gacatcataa acgatatcaa gcttacactt catatggagt taaacttggg 780
cagtgttaat aaaatcaaaa cgtgattcta ctgtacattg cattattcat aatttaattg 840
tttgaaatta caataataa atcaactaat taaatactaa agttttgttc ctttttaaag 900
gaaataacca caagattttt ccagcccaa attccagcgc caattttagg ccaactttgg 960
ctgttttctt ccaaaagtgc ttatgtggaa ttgggatccc cagtgtagtg acagacagtc 1020
atgactgctg ctgagtttga tctgtgaagg tagtgaatg tggccctgat gtttcttaac 1080
cctgatttgg taactaccag ccctgacacc atcagtgtt gatgtagcct ggaaccccag 1140
gccactgac gcactgggca cggggctctg ggtcgaaagg tggagccgtc actgttggtc 1200
atgtgcattt ggagcactgt gggaatagtc tggcagctgt gtgctgatta aatgtctttg 1260
gcaaggcagg gggcaggaaa aggccttgtg gaaacaaagg caccaaggat caccacagcc 1320
cagtgaaggc agaagaggtc acgtggatca gcctgtgtct ttccagcaga atctgattaa 1380
agcctgtaat gctgtagggt gaaggttcag ggcagatgtc agcataaccgc agtgagact 1440
ttctgcagt aaactttatc gatccctaga ggggagagag agatgcagct ttagcactag 1500
ttcctgggag tgccagggcc taacaacccc acagagcaga cgctaaaaat gcaagaagg 1560
atggacaagt actagtattg ggggccacag caggrrtaaa atagcattac atccactyag 1620
tktgagacag atgaggaaac cctaggagga ggcgctccct aagagggaatg 1670

```

<210> 665

<211> 3364

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (643)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (898)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1097)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1470)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1881)

<223> n equals a,t,g, or c

<400> 665

tcgacccacg cgtccgactg agcgcctggtt gcccatgcgg ccctagggct gggagcgcgg 60
cgccgctctc cgctgcgggg gaggccatgg cggaaccttc ccaggccccg accccggccc 120
cggtgcgca gccccggccc ctccagtcctc cagccctgc cccaactccg actcctgcac 180
ccagcccggc ttcagccccg attccgactc ccaccccggc accagcccct gccccagctg 240
cagccccagc cggcagcaca gggactgggg ggcccggggg aggaagtggg ggggcccggg 300
gcggggggga tccggctcga cctggcctga gccagcagca gcgcgccagt cagaggaagg 360
cgcaagtccg ggggctgcg cgccccaaga agcttgagaa gctaggggtc ttctcggctt 420
gcaaggccaa tgaaacctgt aagtgtaatg gctggaaaaa cccaagccc cccactgcac 480
ccgcgatgga tctgcagcag ccagctgcaa cctgagttag ctgtgccgca gttgtgagca 540
ccccttggtt gaccacgtat ccacttgtag aatgtgtcag aggatgagat aaaccgactg 600
ctgggggatg tgggtgatgt ggagaatctc ttcattgtcg ktnacaagga agaggacaca 660
gacaccaagc aggtctatct ctacctctc aagctactgc ggaaatgcat cctgcagatg 720
accgggcctg tgggtggagg gtccctgggc agccctccat ttgagaaacc taatattgag 780
caggggtgtg tgaactttgt gcagtacaag tttagtccac tggctccccg ggagcggcag 840
acgatgttcg agctctcaaa gatgttcttg ctctgcctta actactggaa gcttgagnca 900
cctgcccagt ttcggcagag gtctcaggt gaggacgtgg ctacctacaa ggtcaattac 960
accagatggc tctgttactg ccacgtgccc cagagctgtg atagcctccc ccgctacgaa 1020
accactcatg tctttggggc aagcctctc cggtccattt tcaccgttac ccgcccggcag 1080
ctgctggaaa agttccnagt ggagaaggac aaattggtgc ccgagaagag gacctcatcc 1140
tactcactt cccaagtaa ggctccttct ggccctaccag gatttgccc caagtccaca 1200
tcctccctgt tgtccctttt tttccagraa ggcttctctg attggtccct cctctccctc 1260
catgggcctt ttgggatctg ggcgtctacc tggcagactt gcccatggcc cagaagcaac 1320
ttgctagtac tagctgggg atggcagatt cctgtccatg ctggaggagg agatctatgg 1380
ggcaactct ccaatctggg agtcargctt camcatgcca mcctcagagg ggacacagct 1440
ggtytcccgg gccagcttca gtcagtgan ggggtgttcc cagcaccccc atcttcagcc 1500
ccagcatggg tgggggcagc aacagctccc tgagtctgga ttctgcaggg gccgagccta 1560
tgccaggcga gaagaggacg ctcccagaga acctgaccct ggaggatgcc aagcggctcc 1620
gtgtgatggg tgacatcccc atggagctgg tcaatgaggt catgctgacc atcactgacc 1680
ctgctgccat gctggggcct garacgagcc tgctttcggc caatgcggcc cgggatgaga 1740
cagcccgcct ggaggagcgc cgsggcatca tcgagttcca tgctatcgcc aactcactga 1800
cgcccaaggc caaccggcgg gtgttgctgt ggctcgtggg gctgcagaat gtcttttccc 1860
accagctgcc gcgcagtcct naaggartat atcgcccgcc tcgtctttga cccgaagcac 1920
aagactctgg ccttgatcaa ggatgggcgg gtcacgggtg gcatctgctt ccgcatgttt 1980
cccacccagg gcttcacgga gattgtcttc tgtgctgtca cctcgaatga gcaggatcaag 2040
ggttatggga cccacctgat gaaccacctg aaggagtatc acatcaagca caacattctc 2100
tacttctca cctacgccga cgagtacgcc atcggctact tcaaaaagca gggtttctcc 2160
aaggacatca aggtgcccga gagccgctac ctgggctaca tcaaggacta cgagggagcg 2220
acgctgatgg agtgtgagct gaatccccgc atcccttaca cggagctgtc ccacatcatc 2280
aagaagcaga aagagatcat caagaagctg attgagcgca aacaggccca gatccgcaag 2340
gtctacccgg ggctcagctg cttcaaggag ggctgtaggc agatccctgt ggagagcgtt 2400
cttggtcttc gagagacagg ctggaagcat tggggaagga gaaggggaag gagctgaagg 2460
accccgacca gctctacaca accctcaaaa acctgctggc ccaatcaag tctcacccca 2520

gtgcctggcc cttcatggag cctgtgaaga agtcggaggc ccctgactac tacgaggtca 2580
tccgcttccc cattgacctg aagaccatga ctgagcggct gcgaagccgc tactacgtga 2640
cccgaagct ctttgtggcc gacctgcagc gggatcatcg caactgtcgc gagtacaacc 2700
ccccggacag cgagtactgc cgctgtgcc a ggccttggga gaagttcttc tacttcaagc 2760
tcaaggaggg aggcctcatt gacaagtagg cccatctttg ggccgcagcc ctgacctgga 2820
atgtctccac ctccgattct gatctgatcc ttagggggtg ccctggcccc acggaccgga 2880
ctcagcttga gacactccag ccaaggggtcc tccggaccgc atcctgcagc tctttctgga 2940
ccttcaggca cccccaagcg tgcagctctg tcccagcctt cactgtgtgt gagaggtctc 3000
ctgggttggg gccagcccc tctagagtag ctggtggcca gggatgaacc ttgccagcc 3060
gtggtggccc ccaggcctgg tccccaagag ctttggaggc ttggattcct gggcctggcc 3120
caggtggctg tttccctgag gaccagaact gctcatttta gcttgagtga tggcttcagg 3180
ggttggaagt tcagcccaa ctgaaggggg ccatgccttg tccagcactg ttctgtcagt 3240
gtcccccagg ggtgggggg atggggacca ttcattccct ggcattaatc ccttagaggg 3300
aataataaag ctttttattt ctctgaaaa aaaaaaaaa aaaaaacctt gggggggggc 3360
ccgt 3364

<210> 666

<211> 1223

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1122)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1123)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1133)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1137)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1205)

<223> n equals a,t,g, or c

<400> 666

attcggcacg tggaaaaaaaa aaaaaaaaaac cctcagagat agtctttgtg aagagcttct 60
gacagaatca ctgagtacct tccttcccc agatgwgga gacawggggg tctcagtgtc 120
tgtgtgtct cctcttctct tccccaacca aggactgtgc cattactgcc cgtctcaact 180
gtccatgcag gaggacagag ttgcctggwa ctcttaccct tgtccctctc ctaaaggag 240


```
cacaaggaaa ctgaagagac tgaaaaagaa gagagtttgt agctgaaaaa gaatagggat 300
agcaaggaaa cccagaactg cattccccta agtggggcca tcccatgtga ttgaattgtc 360
catagcttgc ctatggtgag aaatgtgcat gctccgtgag ctggtctctt gaaacaggac 420
ttatgyttcc tctatattct ggtaaattt tccaaacaca taagttcact gagcacagat 480
ttcttatcca gagacaagta gaatctaacc gcagactgtt ggagagttt ccaggcactt 540
agccatgttc ccttcctgac tcaaatcccc aaaggccttc actctcactg agaatcacac 600
tactgtccca tagataaggc aggcattgaa gcacctgtcg tgatcctcta ggggggagaa 660
tgaaaggtta tttcctgcat tgcattcatca tagcttttaa tataatgcta cagaatcata 720
tccacattag gtttagagttc agatatttgg atatgaatac ctaacctagc catatccatg 780
gccatctctg ttcttttcag caatgttttc catattatat tagcaatgac agaaacagaa 840
caagccaaga tccagtcagt tcttgggagc ttgtctagag caccaagtaa tgaaatagcc 900
aggtagtggg atgactgtac ctttaaaaaat acataattta gtttgcaagc tatattatgc 960
tactttctat tttcctygtt actttatagc aattcatttt accctcaca agtcaattta 1020
gaaccttatac attaaactggg gatgtgtagt ggawattttt ggggcctctg gggggttcca 1080
tggtggccaa taccaaggga ataatttaaat ttaaaaatag gnnttattta gangganggc 1140
accagtgggtg gttggacctg tgggacacca ccccatattt ttaaaaacc ttggaaggtt 1200
cccnnaaatt ggtgtgaccg gaa 1223
```

<210> 667

<211> 1997

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1289)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1951)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1974)

<223> n equals a,t,g, or c

<400> 667

```
gtggaggggc ggcttggggc aagcgcgcgc gcgcagtgca gaagccagcc ccccgcggt 60
gaggtaactca aggtgcccaa aggcggggta gtgacctcgc gcgtgcgctg tgcccgcggc 120
agcgcggggt cctagtgtgt gggttgttgt tggcacgcga cggcgctgac gcagtgaagg 180
cggcgagagg atttgcggcc gggacccacc ccctgctcca gtcgctatcg gaggccgcgc 240
gggtggctga gcagcgccct ggtgcgctcg cttagcgggc gacggaatca gacggacgtg 300
gacgcccccg gagtgaagc cgaagcagga gttgtgtgtg ctgaggggct gccgcagccg 360
ccgcgagcct ccggacagac gccagagcga ggaggcgct acgcgacttg gcaagatgac 420
ccagttcctg ccgccaacc ttctggccct ctttgcccc cgtgacccta ttccatacct 480
gccaccctg gagaaactgc cacatgaaaa acaccacaat caaccttatt gtggcattgc 540
gccgtacatt cgagagtttg aggaccctcg agatgcccc cctccaactc gtgctgaaac 600
ccgagaggag cgcattggaga ggaaaagacg ggaaaagatt gagcggcgac agcaagaagt 660
ggagacagag cttaaaatgt gggaccctca caatgatccc aatgctcagg gggatgcctt 720
```

caagactctc ttcgtggcga gagtgaatta tgacacaaca gaatccaagc tccggagaga 780
gtttgaggtg tacggaccta tcaaaagaat acacatgggc tacagtaagc ggtcaggaaa 840
gccccgtggc tatgccttca tcgagtacga acacgagcga gacatgcact ccgcttataa 900
acacgcagat ggcaagaaga ttgatggcag gagggtcctt gtggacgtgg agagggggccg 960
aaccgtgaag ggctggaggc ccggcggcta ggaggaggcc tcggtggtac cagaagagga 1020
ggggctgatg tgaacatccg gcattcaggc cgcgatgaca cctcccgcta cgatgagagg 1080
ccccggccct ccccgcttcc gcacagggac cgggaccggg accgtgagcg ggagcgaga 1140
gagcggagcc gggagcgaga caaggagcga gaacggcgac gctcccgctc ccgggaccgg 1200
cggaggcgct cacggagtcg cgacaaggag gagcggaggc gctccaggga gcggagcaag 1260
gacaaggacc gggaccggaa gcggcgaaanc agccggagtc gggagcgggc ccggcgggag 1320
cgggagcgca aggaggagct gcgtggyggc ggtggcgaca tggcggagcc tccgaggcgg 1380
gtgacgcgcc ccctgatgat gggcctccag gggagctcgg gcctgacggc cctgacggtc 1440
cagaggaaaa gggccgggat cgtgaccggg agcgacggcg gagccaccgg agcgagcgcg 1500
agcggcgccg ggaccgggat cgtgaccgtg accgtgaccg cgagcacaaa cgggggggagc 1560
ggggcagtga gcggggcagg gatgaggccc gaggtggggg cgggtggccag gacaacgggc 1620
tgaggggctc gggcaacgac agccgagaca tgtacatgga gtctgagggc ggcgacggct 1680
acctggctcc ggagaatggg tatttgatgg aggtgcccgc ggagtgaaga ggtcgtcctc 1740
tccatctgct gtgtttggac gcgttcctgc ccagcccctt gctgtcatcc cctcccccaa 1800
ccttgggcac ttgagtttgt cctccaaggg taggtgtctc atttgttctg gccccttgga 1860
tttaaaaata aaattaattt cctgttgawa aaaaaaaaaa aaaaaaaaaa araaaaggag 1920
agccgctctt agaggatccc tccgaggggg ncccaagctt tacgcgtggc atgncgaagt 1980
caaaagccct ttcccc 1997

<210> 668

<211> 586

<212> DNA

<213> Homo sapiens

<400> 668

gcgcccgcgt gacgtcatct accccaaacg ctgtggcccc ggcacgcacg gcttcggggc 60
gggactacgc ggtgacgtcg aggtgcccgc cgcaccggcg tcmgtcttgg ctggcagacc 120
tgtactccgt actccgtact tcgtagtcgc agcggcgcgg tcttcggcag tctagtcata 180
caccgccatc ctgggccccca cgtgttgccct gaccattcct gagcccaggc gggagccgtg 240
gctgaggtga cgggtctcaa gtggaagagc ttactgtcac agcaactcct ttgcaagatg 300
ccccggccag gaatagtgtc tgaacacccc aggcctgctg aggtccctcc ttgagtctca 360
tgttcaagca gtctttgtcc atgaaactgg gaggcgaccg tgtagctgc cagttcctga 420
cagccacctc tcaccagtgg cttcactctg tgtccctgac ccagcacatg gcacaagagt 480
gctgccatcc gtcagtgtty tacagcagca atcccagatg stggaasyta agggactgac 540
cctattgagg ttcgttatgg ttgtcagctt ttcctgaatt ttatt 586

<210> 669

<211> 1097

<212> DNA

<213> Homo sapiens

<400> 669

tcgacccacg cgtccggggc actccctatg ttactgacga gaccggcggc aagtatatcg 60
cgtcaacaca gcgacctgac gggacctggc gcaascagcg gaggtgaaa gaaggatatg 120
tgccccagga ggagggtccca gtatatgaaa acaagtatgt gaagtttttc aagagtaaac 180
cagagttgcc ccaggggcta agccctgagg cactgtctcc tgtaacccca tccaggcctg 240
aaggtggtga accaggcctc tccaagacag ccaaacgtaa cctgaagcga aaggagaaga 300

ggcggcagca gcaagagaaa ggagaggcag aggccttgag caggactctt gataaggtgt 360
ccctggaaga gacagcccaa ctccccagtg ctccacaggg ctytcgggca gccccacag 420
ctgcatctga ccagcctgac tcagctgcca cacttgagaa agccaagaag ataaagaacc 480
taaagaagaa actccggcag gtggaagagc tgcagcagcg gatccaggct ggggaagtca 540
gccagccag caaagagcag ctagaaaagc tagcaaggag gagggcgcta gaagaggagt 600
tagaggactt ggagtttagc ctctraggcc tttggggaat aggggaatgga ctgcagaaca 660
aaccgtgggg ctctctgggg tctgggggaa tacgggcaac agcagtcagg aggggtaccc 720
cccatactgg cttccacctc ctgcggccca gctctgtcct ccagagccta gcgtctccct 780
caatccttcc cttttcttcc caacttctac tttttggact ttccccctcc cattcccagt 840
gttcaaaatc tcagtgacta ccccaggtag ctttgctgct gatttggtg tcttgtttaa 900
aagaaaatca ggtgggtggg aatctcttgg agaactgagg ctgagggtag agggagtatg 960
cccaagtctt ggagtcttgg ttctgttcg cggtgtttat gggttatttc cctctccatc 1020
cctcattttt tttttttttt taaaaaagc aaaaatgaga ataaacacaa gtagacatgt 1080
caaaaaaaaa aaaaaaa 1097

<210> 670

<211> 2900

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2418)

<223> n equals a,t,g, or c

<400> 670

tcgacccacg cgtccggccg gctcgacgga ttgccatggc gccgctgctg gagtacgagc 60
gacactgggtg ctggaactgc tcgacactga cgggctagta gtgtgcgccc gcgggctcgg 120
cgcggaccgg ctctcttacc actttctcca gctgcactgc caccacagcct gcctgggtgt 180
ggtgctcaac acgcagccgg ccgaggagga gtattttatc aatcagctga agatagaagg 240
agtgaacac ctccctcgcc gtgtaacaaa tgaaatcaca agcaacagtc gctatgaagt 300
ttacacacaa ggtggtgtta tatttgcgac aagtaggata cttgtggttg acttcttgac 360
tgatagaata ccttcagatt taattactgg catcttggtg tatagagccc acagaataat 420
cgagtcttgt caagaagcat tcactttgcg cctctttcgc cagaaaaaca aacgtgggtt 480
tattaaagct ttcacagaca atgctgttgc ctttgatact ggtttttgtc atgtggaaag 540
agtgatgaga aatctttttg tgaggaaact gtatctgttg ccaagggttc atgtagcagt 600
aaactcattt ttagaacagc acaaacctga agttgtagaa atccatgttt ctatgacacc 660
taccatgctt gctatacaga ctgctatact ggacatttta aatgcatgtc taaaggaaact 720
aaaatgccat aacccatcgc ttgaagtgga agatttatct ttagaaaatg ctattggaaa 780
accttttgac aagacaatcc gccattatct ggatcctttg tggcaccagc ttggagccaa 840
gactaaatcc ttagttcagg atttgaagat attacgaact ttgctgcagt atctctctca 900
gtatgattgt gtcacatttc ttaatcttct ggaatctctg agagcaacgg aaaaagcttt 960
tggtcagaat tcaggttggc tgtttcttga ctccagcacc tcgatgttta taaatgctcg 1020
agcaagggtt tatcatcttc cagatgccaa aatgagtaaa aaagaaaaaa tatctgaaaa 1080
aatggaaatt aaaraagggg aagaaacaaa aaaggaactg gtcctagaaa gcaacccaaa 1140
gtgggaggca ctgactgaag tattaaaaga aattgaggca gaaaataagg agagtgaagc 1200
tcttggtggt ccagggtcaag tactgatttg tgcaagtgat gaccgaacat gttcccagct 1260
gagagactat atcactcttg gagcgaggc cttcttattg aggctctaca ggaaaacctt 1320
tgagaaggat agcaaagctg aagaagtctg gatgaaattt aggaaggaag acagttcaaa 1380
gagaattagg aaatctcaca aaagacctaa agacccccaa aacaaaagac gggcttctac 1440
caaagaaaga accctcaaaa agaaaaaacg gaagttgacc ttaactcaaa tggtaggaaa 1500

acctgaagaa ctggaagagg aaggagatgt cgaggaagga tatcgctcag aaataagcag 1560
tagcccagaa asctgcccgg aagaaattaa gcatgaagaa tttgatgtaa atttgtcatc 1620
ggatgctgct ttcggaatcc tgaaagaacc cctcactatc atccatccgc ttctgggttg 1680
cagcgacccc tatgctctga caaggggtact acatgaagtg gagccaagat acgtgggttct 1740
ttatgacgca gagctaacct ttgttcggca gcttgaaatt tacagggcga gtaggcctgg 1800
gaaacctctg aggggtttact ttcttatata cggaggttca actgaggaac aacgctatct 1860
cactgctttg cggaaagaaa aggaagcttt tgaaaaactc ataagggaaa aagcaagcat 1920
ggttgtccct gaagaaagag aaggcagaga tgaaacaaac ttagacctag taagaggcac 1980
agcatctgca gatgtttcca ctgacactcg gaaagccggt ggccaggaac agaattgttac 2040
acagcaaagc atagtgttg rtatgcgtga atttcgaaat gagcttccat ctctgatcca 2100
tcgtcgggac attgacattg aaccctgtac tttagagggt ggagattaca tcctcactcc 2160
agaaatgtgc gtggagcgca agagtatcag tgattttaatc ggctctttaa ataacggccg 2220
cctctacagc cagtgcactc ccatgtcccg ctactacaag cgctcccgctc ttctgattga 2280
gtttgaccct agcaagcctt tctctctcac ttcccaggt gccttgtttc aggagatctc 2340
cagcaatgac attagtcca aactcactct tcttacactt cacttcccca gactacggat 2400
tctctggtgc cctctctc atgcaacggc ggagttgttt gaggagctga aacaaagcaa 2460
gccacagcct gatgcggcga cagcactggc cattacagca gattcygaaa cccttcccga 2520
gtcagagaag tataatcctg gtccccaaga cttcttgta aaaatgccag gggatgaatgc 2580
caaaaactgc cgtccttg tgcaccacgt taagaacatc gcagaattag cagccctgtc 2640
acaagacgag ctacagagta ttctggggaa tgctgcaaat gccaaacagc tttatgattt 2700
cattcacacc tcttttgag aagtcgtatc aaaaggaaaa gggaaaaagt gaacagtgat 2760
ggctgttttc ttatcccatg cctgtacttt tcagcggctc cttgccagac atcataggctc 2820
attattaatt attggtttgc tatttcattc ttttccaatg ctcttaatga ttgtacggtg 2880
gaccagagtt cagagagccc 2900

<210> 671

<211> 987

<212> DNA

<213> Homo sapiens

<400> 671

tcgacccacg cgtccggctg cgcagaggcg cggcggctgt acaactcggc cgttgtcacc 60
atgccggctg tccggaagat tttccgtcgc cgccggggcg actcggagtc agaggaagat 120
gagcaggact cagaggagg tgcattaaaa ctggaagaga ccagagargt acagaacttg 180
aggaagaggc ccaacggggt gagtgcgtg gccttgctgg tgggagagaa ggtacaagag 240
gagaccactc tagtgatga tccctttcag atgaagacag gtggtatggt ggatatgaag 300
aaactgaagg aaaggggcaa agataagatc agtgaggagg aggacctgca cctggggaca 360
tcgttttctg cagaaaccaa ccgaaggatg aggatgcaga catgatgaag tacattgaga 420
cagagctaaa gaagaggaaa gggatcgtgg aacatgagga acagaaagt aagccaaaga 480
atgcagagga ctgtctttat gaacttcag aaaaacatccg tgtttcctca gcaaagaaga 540
ccgaggagat gctttccaac cagatgctga gtggcattcc tgagggtggac ctgggcacgc 600
atgctaaaaat aaaaaatatc atttccacgg aggatgccaa ggcccgctc ctggcagagc 660
agcagaacaa gaagaaagac agcgagacct ccttcgtgcc taccaacatg gctgtgaatt 720
atgtgcagca caacagattt tatcatgagg agctcaacgc gccatcacg agaaacaaag 780
aagagcccaa ggcccgccc ttgagagtag gggacacgga gaagccagag cctgagcggg 840
cccctcctaa ccgcaagcgt cctgctaacc agaaggcaac tgatgactat cattatgaga 900
agttcaagaa aatgaatagg cgggtactgag ttgtgcasag tgggatgtaa atatcgctt 960
cctctcccta tatccctccc atgaaaa 987

<210> 672

<211> 2825

<212> DNA

<213> Homo sapiens

<400> 672

```
cctcgagttc gtggtgatgt tggaatggct ggagttgcta ttgacactgt ggaagatacc 60
aaaattcttt ttgatggaat tccttttagaa aaaatgtcag tttccatgac tatgaatgga 120
gcagttattc cagttcttgc aaattttata gtaactggag aagaacaagg tgtacctaaa 180
gagaarctta ctggtacat ccaaaatgat atactaaagg aatttatggt tcgaaataca 240
tacatttttc ctccagaacc atccatgaaa attattgctg acatatttga atatacagca 300
aagcacatgc caaaatttaa ttcaatttca attagtggat accatatgca ggaagcaggg 360
gctgatgcca ttctggagct ggcctatact ttagcagatg gattggagta ctctagaact 420
ggactccagg ctggcctgac aattgatgaa tttgcaccaa gggtgtcttt ctctctggga 480
attggaatga atttctatat ggaaatagca aagatgagag ctggtagaag actctgggct 540
cacttaatat agaaaatgtt tcagcctaaa aactcaaaat ctcttcttct aagagcacac 600
tgtcagacat ctggtatggt acttactgag caggatocct acaataatat tgtccgtact 660
gcaatagaag caatggcagc agtatttggg gggactcagt ctttgcacac aaattctttt 720
gatgaagctt tgggtttgcc aactgtgaaa agtgctcgaa ttgccaggaa cacacaaatc 780
atcattcaag aagaatctgg gattcccaaa gtggctgata cttggggagg ttcttacatg 840
atggaatgtc tcacaaatga tgtttatgat gctgctttaa agctcattaa tgaaattgaa 900
gaaatgggtg gaatggccaa agctgtagct gagggaatac ctaaacttcg aattgaagaa 960
tgtgtctgcc gaagacaagc tagaatagat tctggttctg aagtaattgt tggagtaaat 1020
aagtaccagt tggaaaaaga agacgctgta gaaagtcttg caattgataa tacttcagtg 1080
cgaaacaggc agattgaaaa acttaagaag atcaaatcca gcagggatca agctttggct 1140
gaacgttgct ttgctgcact aaccgaatgt gctgctagcg gagatggaaa tatcctggct 1200
cttgacagtg atgcatctcg ggcaagatgt acagtgggag aaatcacaga tgccctgaaa 1260
aaggatattg gtgaacataa agcgaatgat cgaatggtga gtggagcata tcgccaggaa 1320
tttgagagaa gtaaaagat aacatctgct atcaagaggg ttcataaatt catggaacgt 1380
gaaggtcgca gctcgtcttc ttgtagcaaa aatgggacaa gatggccatg acagaggagc 1440
aaaagttatt gctacaggat ttgctgatct tgggtttgat gtggacatag gccctctttt 1500
ccagactcct cgtgaagtgg cccagcaggc tgtggatgct gatgtgcatg ctgtgggctt 1560
aagcacctc gctgctggct ataaaacct agttcctgaa ctcatcaaag aacttaactc 1620
ccttgacggt ccagatatct ttgtcatgtg tggaggggtg ataccacctc aggattatga 1680
atttctgttt gaagtgggtg tttccaatgt atttggctct gggactcgaa ttccaaaggc 1740
tgccgttcag gtgcttgatg atattgagaa gtgtttggaa aagaagcagc aatctgtata 1800
atatcctctt ttgttttag cttttgtcta aaatattatt ttagttatga tcaaagaaga 1860
gagtaaagct atgtcttcaa tttaatttca atacctgatt tgtactttcc ttgaaagctt 1920
tactttaaaa taccttactt ataggcctgg tgctcatgcta taagtatgta catacagttt 1980
cacttcaaaa ataaaaaaa aatccctaaa aactctctat actctctata acaatacttt 2040
atcaagaact ctggacaatg gtattatttt taaaaatcat ggtgatgtat ttattagaat 2100
gtttcttata aatctgttta ctttttatat taagaattaa actgtacctt aaaaaactct 2160
gactattccc atttgtcagt ttagcattac attgtcttga gcaccagaaa ataaaaatcca 2220
tatattaata aaaacctatc ttgaaaaact agtggagtgt atttacgtgg caaaagagat 2280
tttgggagga gtcctcagcc aaattctacc agaatacact taataaaaaga agtattaaaa 2340
tcaagcacag caggttggaat tatggggaat ttgacagtat atttcttcaa gtctgagttt 2400
actttcttcc tgatcatgac catctgacct tgttatttct gggcttggct caagaccaag 2460
gagagtggat gttgatgaac attcctttta ataaaagtgc ttaggttgta gttatggctt 2520
tgtctagaat ggtgatgtca actgtgagtg taggtctgtg atatagaaag aattcaactt 2580
tccagatcta gaaagatgct acctgcata gatttgctcc tttaacataa attgcaaaaa 2640
taaaaatatc acagagaaca cctgtacttt gcttactgaa agatttgctc actaaagaag 2700
gaaagtggcc atttacctgt ttaacaaatc tgcacatcct gcacatgttc cccagaatgt 2760
aaaataaaaa aagtttaaat aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2820
```

tcgag

2825

<210> 673

<211> 1430

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (435)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1046)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1409)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1413)

<223> n equals a,t,g, or c

<400> 673

```
ttagccaact ctaatacgac tcactmtagg ggaaagctgg tacgcctgca gtaccgggtcc 60
gaattcccgg gtcgaccac gcgtccggtt ccaaaatggc ggcaggggtg gccgggtggg 120
gggttgaggc agaggagttc gaagatgctc ctgatgtgga gccgctggag cctacactta 180
gcaacatcat cgagcagcgc acctgaagtg gatcttcgtc gggggcaagg gtggtgtggg 240
caagaccacc tgcagctgca gcctggcagt ccagctctcc aaggggcgtg agagtgttct 300
gatcatctcc acagaccag cacacaacat ctgagatgct ttgaccaga agttctcaaa 360
ggtgcctacc aaggtcaaag gctatgacaa cctctttgct atggagattg accccagcct 420
gggcgtggcg gastngcctg acgagttctt cgaggaggac aacatgctga gcatgggcaa 480
gaagatgatg caggaggcca tgagcgcatt tcccggcatc gatgaggcca tgagctatgc 540
cgaggtcatt aggcctggtg agggcatgaa cttctcgggtg gtggtatattg acacggcacc 600
cacgggccac accctgaggc tgctcaactt cccaccatc gtggagcggg gcctggggccg 660
gcttatgcag atcaagaacc agatcagccc tttcatctca cagatgtgca acatgctggg 720
cctgggggac atgaacgcag accagctggc ctccaagctg gaggagacgc tgcccgtcat 780
ccgctcagtc agcgaacagt tcaaggaccc tgagcagaca actttcatct gcgtatgcat 840
tgctgagttc ctgtccctgt atgagacaga gaggctgac caggagctgg ccaagtgcaa 900
gattgacaca cacaatataa ttgtcaacca gtcgtcttc cccgaccccg agaagccctg 960
caagatgtgt gagggccgct acaagatcca ggccaagtat ctggaccaga tggaggacct 1020
gtatgaagac ttccacatcg tgaagntgcc gctgttacc catgaggtgc ggggggcaga 1080
caaggtcaac acctctctcg ccctcctcct ggagccctac aagcccccca gtgcccagta 1140
gcacagctgc cagccccaac cgctgccatt tcacactcac cctccaccct cccaccccc 1200
tcggggcaga gtttgacaa agtccccccc ataatacagg gggagccact tgggcaggag 1260
gcagggaggg gtccattccc cctggtgggg ctggtgggga gctgtagttg cccctacct 1320
ctccacctc ttgctcttca ataaaatgat cttaaactgc aaaaaaaaaa aaaaaaaaaa 1380
```

aaaaaaaaa aaaaaaaaaa aaaaaaana aanttaaaaa aaaaaaaaaa

1430

<210> 674

<211> 1125

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1098)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1103)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1120)

<223> n equals a,t,g, or c

<400> 674

ggcacgagga gagaggtcag ggtaggtttt traagatggc ggccctcaag gctctggtgt 60
ccggctgttg gcggtcttc cgtgggctac tagcggggcc ggacgcgacc agctgggtctc 120
ggcttccagc tcgcgggttc agggaagtgg tggagacca agaagggaag acaactataa 180
ttgaaggccg taccacagcg actcccaagg agagtccaaa tcctcctaac ccctctggcc 240
agtgcgccat ctgccgttg aacctgaagc acaagtataa ctatgacgat gttctgctgc 300
ttagccagtt catccggcct catggaggca tgctgccccg aaagatcaca ggcctatgcc 360
aggaagaaca ccgcaagatc gaggagtgtg tgaagatggc ccaccgagca ggtctattac 420
caaatacacag gcctcggtt cctgaaggag ttgttccgaa gagcaaacc caactcaacc 480
ggtacctgac gcgctgggct cctggctccg tcaagcccat ctacaaaaaa ggcccccgct 540
ggaacagggt gcgcatgccc gtggggtcac cccttctgag ggacaatgtc tgctactcaa 600
gaacaccttg gaagctgtat cactgacaga gagcagtgtc tccagagtgc ctctgcacc 660
tgtgtgtggg agtaggagc cactcacaa gcccttgccc acaactatac tcctgtccca 720
ccccaccacg atggcctggt ccctccaaca tgcattggca ggggacagtg ggactaactt 780
cagtaccctt ggctgcaca gtagcaatgc tgggagctag aggcaggcag ggcagttggg 840
tcccttgcca gctgctatgg ggcttaggcc atgctcagtg ctggggacag gagttttgcc 900
caacgcagtg tcataaactg ggttcatggg cttaccatt ggggtgtgcgc tctactgctg 960
ggaagtgcag ggggtcctgg gcacattgcc agctgggtgc tgagcattga gtcactgatc 1020
tcttgtgatg gggccaatga gtcaattgaa ttcattggcc aaacagggtc catcctcttc 1080
aaaaaaaaa aaaaaaanc cngngggggg cccggaaccn aattc 1125

<210> 675

<211> 1077

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (523)

<223> n equals a,t,g, or c

<400> 675

```
acccacgcgt ccgagagtcc accttgcgac cgtatccgct agcgcggcct gggatgcgct 60
tgggctccct gttcgttccc acatgcaggg cagcacaagg agaatgggcg tcatgactga 120
tgtccaccgg cgcttctctc agttgctgat gacctatggc gtgctagagg aatgggacgt 180
gaagcgcttg cagacgcact gctacaaggc ccatgaccgc aatgccaccg tagataagtt 240
ggaggacttc atcaacaaca ttaacagtgt cttggagtcc ttgtatatg agataaagag 300
aggagtcacg gaagatgatg ggagacccat ttatgcgttg gtgaatcttg ctacaacttc 360
aatttccaaa atggctacgg attttgcaga gaatgaactg gatttgttta gaaaggctct 420
ggaactgatt attgactcag aaaccggctt tgcgtcttcc acaaacatat tgaacctggt 480
tgatcaactt aaaggcaaga agatgaggaa gaaggaaagc gancaggtgc tgcagaagtt 540
tgttcaaaac aagtggctga ttgagaagga aggggagttc accctgcacg gccggggccat 600
cctggagatg garcaatata tccgggagac gtaccccgac gcggtgaaga tctgcaatat 660
ctgtcacagc ctctctatcc aggttcaaag ctgcgaaacc tgtgggatca ggatgcactt 720
accctgcgtg gccaaagtact tccagtcgaa tgctgaaccg cgctgcccc actgcaacga 780
ctactggccc cagagatcc caaaagtctt cgaccctgag aaggagaggg agtctggtgt 840
cttgaatacg aacaaaaagt cctgcggtcc aggcagcatt agccatcgtg ccctgctgag 900
gggctggctg ccttgagtgg cctgatcgcc acagcccttc ttggaagaaa ggcgtcygtg 960
tttcagggtc cacgcgagtc acctctttcg tcttaatgtt caccgtccac agctttggaa 1020
taaaccatcc tgggaagttr aaaaaaaaaa aaaaaaaaaa tttggggggg ggggccc 1077
```

<210> 676

<211> 920

<212> DNA

<213> Homo sapiens

<400> 676

```
ctgagtggag ctccgggctg cgtaggggag ctgagccgag yggctgggag ggcctgggsk 60
ggccagcgga ggggagacgt cggttgagcg gcggcgaaca tgcgcttttg acacattgga 120
ggctttcttg atcatggatg gtgaagatat accagatttt tcaagtttaa aggaggaaac 180
tgcttatttg aaggaaacttt ccttgaagta taagcaaagg gcaacaatag tttcactgga 240
agactttgaa caaaggctaa accaggccat tgaacgaaat gcatttttag aaagtgaact 300
tgatgaaaag gaatctttgt tggctctctg acagagggtta aaggatgaag caagagattt 360
aaggcaagaa ctagcagttc gggaaagaca acaggaagta actagaaagt cggctcctag 420
ctctccaact ctgactgtg aaaagatgga ctccgcccgc caagcatcac tttctttgcc 480
agctacccct gttggcaaa gaaacggagaa cacttttccct tcaccgaaag ctataccaaa 540
tggttttggt accagtccac taactccctc tgctaggata tcagcactaa acatcgtggg 600
gggatctctt acgaaaagta ggggcttttag aatccaaatt agcagcttgc aggaattttg 660
caaaggacca agcatcacgr aaatccctata ttccagggaa tggttaactgt ggggtgctga 720
atggcaatgg cacaaagtcc tctcgatcag ggcatacatc tttcttcgac aaaggggag 780
taaacggctt tgaccccgct cctcctcctc ctctgggcag ctgtatagga tcatcatgtg 840
gttacaaaaa atacttccct caaaaaaatt cttttaatgt ggaaacaata aatttcacag 900
aaaaaaaaa aaaaaaaaaa
```

920

<210> 677

<211> 1247

<212> DNA

<213> Homo sapiens

<400> 677


```
caaatgactg gttctttaac tcctaccttt ctctcctctc ttcctgtaat gttgttactg 60
aaggcaggaa gggagactcc ttggctaaag agcagagcaa gagcctcaaa gtggtctttg 120
tgagccaccc tggactactg gttcagtaga ggggtgagtc aagcaatatt tgaggacggg 180
atataaacag tatttcttaa agttgtcacc aatttttccc ccgatgaggg cattccagac 240
ccaaattagt cataacagag ccaggacaat aatcacatct cctgattctg agcctgaatg 300
cttcccacag gactgcgtcg ctcccaatgc tctgaggtcc attgtggggg aaagttgcc 360
ctgggattcc acctcaaggc ctggggacca agcctccagg attcctcttg agactcctcc 420
actatttcat taccatcccg ccacatcttc tagtgctatg ccctgggtcc ctttggaatc 480
ctctcaatcc caaagaaggc ctctaccac ctctaaggca tcaaagggtg tagaaagtgc 540
cccaagactc aacagggcac ccacatcttc atagaagaca ctggtgcctg gtgtgtaggt 600
gctcctgggt ttgcagtagt cgttcaggag gtttttgaa cgatagcaac attgctccag 660
gggtccacag aagccatggt ctccacagctg ctccagccata atccggtaca cctgggtggt 720
tcgatggcag gtgcggaggt ttctgtggat ccargcctct gagaattccc agaaaaatct 780
tggtttcttt gtatcccagt gcaactcctgc cacctctctc tctccaggg cctgccactc 840
cagctcgctc caggtyttgg cttttctcca gattagcacc tggccagact tgactctcac 900
cccagccact gagcagtctt tcacactctc tttttctcca gaatttgaag atctagatgc 960
tgtgggtttt matcctactc cacgtgggag ttacttttg gcctatggat tggaaaatct 1020
gtttgcaggc agacaaaagg gagatgtaat gggttggtta atctaattccc aaccatttta 1080
tatgccagrg agaggagata gtaatttttt tttttaattc tggggggatt cttgggaaag 1140
ctcagtgaag agaacaacta gaaaaaaaaa ttcaggccca aatgcataac tatatatcca 1200
cgttcatcta tcttaataaa aaytcagaca catacctaaa ctgaaaa 1247
```

<210> 678

<211> 2667

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2602)

<223> n equals a,t,g, or c

<400> 678

```
cagtstggtt ggagctgttg tcttgtatgc tcagcgaggc ccggagagac ccgggagaga 60
gctaggccga gtccaccgcc cgagctctgct gcccgagccc gcgttacgca caaagccgcc 120
gatccccggc ctgggggtgag cagagcgacc accgcccggg agcagcgcg cgagacgcac 180
ggtgcgcctt atgccccgc gcccccaccg ccccgccgc ggagccgaa gcgcagcgag 240
agaacgcgcc accgcggggc ccgggtgag ctagcgacct tctcgccacc tgcgcgcagc 300
ccgaggtgag cagtgcgcgg cgagcgggag ggcagcgagg cgttcgcggg cccctcctg 360
ctgcccgggc ccggccgctc atggcgccca tccgcaagaa gctgggtggtg gtgggagcag 420
gcgcgtgttg caagacgtgc ctgctgatcg tggtcagtaa ggacgagttc cccgaggtgt 480
acgtgcccac cgtcttcgag aactatgtgg ccgacattga ggtggacggc aagcaggtgg 540
agctggcgct gtgggacacg gcgggcccag aggactacga ccgcctgcgg ccgctctcct 600
acccggacac cgacgtcatt ctcatgtgct tctcggtgga cagcccggac tcgctggaga 660
acatccccga gaagtgggtc cccgaggtga agcacttctg tcccaatgtg cccatcatcc 720
tggtggccaa caaaaaagac ctgcgagcg acgagcatgt ccgcacagag ctggcccgc 780
tgaagcagga acccgtgcgc acgcatgacg gccgcgccat ggccgtgcgc atccaagcct 840
acgactacct cgagtgtctt gccaaagcca aggaaggcgt gcgcgaggtc ttcgagacgg 900
ccacgcgcgc cgtgcagaa gcgctacggc tcccagaacg gctgcatcaa ctgctgcaag 960
gtgctatgag ggccgcgcc gtcgcgcctg cccctgccgg cagggctccc cctcctggac 1020
cagtcccccg cgagcccgga gaaggggaga cccgtgtccc acaaggacct caccggcctg 1080
```

cctggcatct gtctgctgac gcctctggct tgcgccagga cttggcgtgg gcaccgggag 1140
ccccatccc agtgtctgtg tgcgtccagc tgtgttgac aggcctgggc tccccactga 1200
gtgccaaagg tcccctgagc atgcttttct gaagagccgg gcctcagagt gtgtggctgt 1260
gtgtctgttc gactccccctc gccccathtt caccaccacc ccgcctctga tccccggggg 1320
cgagattggc gcgggagtggt ggccgcgccc catcagatgt tckcccttca ccagcgggag 1380
cttgatatcc cttgtctgta acatagaccc cgggtactgc gggaggggag ggctgctggg 1440
gaggatgggg ggatgttata taaatataga tataatttta ttttcggagc taagatgggt 1500
ttatttaagg gtggtgatgg gtgagcgctc tggcccaggc tgggcmagac tcccgcccaa 1560
gcatgaacag gacttgacca tctttccaac ccctggggaa gacatttgca actgacttgg 1620
ggaggacaca gcttcagcac agcctctcct gcgggccagc ccgctgcgaa ccctccacca 1680
gctaccggag ggaggaggga ggatgcgctg tggggttgtt tttgccataa gcgaactttg 1740
tgctgtcct agaagtgaag attgttcagt ccaagaaact gatgttattt gatttattta 1800
aaggctaaaa tttgtttttt tattctttgc acaattgttt cattgtttga cacttaatgc 1860
actcgtcatt tgcatacgac agtagcattc tgaccacact tgtacgctgt aacctcatct 1920
acttctgatg tttttaaaaa atgactttta acaaggagag ggaaaagaaa cccactaaat 1980
tttgctttgt ttccttgaag aatgtggcaa cactgttttg tgattttatt tgtgcaggtc 2040
atgcacacag ttttgataaa gggcagtaac aagtattggg gcctattttt ttttttttcc 2100
acaaggcatt ctctaaagct atgtgaaatt ttctctgcac ctctgtacag agaatacacc 2160
tgccctgta tatccttttt tcccctcccc tccctccag tggtaactct actaaattgt 2220
tgtctgttt tttatttttt aaataaactg acaaatgaca aaatgggtgag cttatgatgt 2280
ttacataaaa gttctataag ctgtgtatac agttttttat gtaaaatatt aaaagactat 2340
gatgatgaca tttaaaaaaa tggctcttgt ggtttaatag tgtgtaaaaa tacccttggt 2400
aatttgaac aaggagata ttctcctagg cgagrtcctt tcttgcccaa ctccgtttcc 2460
cttatrgcaa atgtagtaaa tgaggrtgaa gtccctttga grgcatgtgg gggttgggtg 2520
accaaggag accrggtgt tcctgtcaca ttcttagagg aagatgagtg gataccccga 2580
caccagtg aaaaactttt gncctattat gtactcagtt caattgggtg agaccgaaga 2640
tcttgatttc attcatctgt gtgtctt 2667

<210> 679

<211> 952

<212> DNA

<213> Homo sapiens

<400> 679

gtaccgggtcc ggaattcccc ggtcgaccca cgcgtccgct gtacgcgtgg gcggagcgcgt 60
gggcgcgagg ggcggagcct gtggaggaag atggctgccg cctgggggtc gtccctaacc 120
gccgcgacgc agagagcggg cactccctgg ccgaggggca ggctcctcac ggccctccctg 180
ggaccccagg cgcgtcggga ggcgtcgtcc tccagccccg aggcgggca agggcagatc 240
cgctcagag acagttgcgt ccagaggcct ttggaaatca ccgaaggkac agaattcctc 300
aggctgcaag tggaggaggg tggatgctcc ggattccaat acaaattttc actggatata 360
gttatcaacc ccgacgacag ggtatttgaa cagggtgggg caagagtggg ggttgactct 420
gtagcttgg ccttcgtgaa agggggccag gtggacttca gccaagaact gatccgaagc 480
tcatttcaag tgttgaacaa tcctcaagca cagcaaggct gtcctctgtg gtcattcttc 540
tctatcaaac tttgatgtga tgactggtga ctctgggatt gtcaccagtt gtaccaattt 600
gaagaacctg gaattagtag aattctagaa gtttacttct aatcatgtcc ctctcaattt 660
tatttccgc agtccaggag tgttatgttt tgccactatt attttcagaa tgtgaagat 720
ttactcttgg ctttaatttt cctccactc agtgctaagg ctgagcctcc agatgctgtt 780
acctcagatt taatcactgg ttgaaactcc gtataatctg tagagcctcc atggctctaa 840
aatttggaa taacttctct tgcccttaaga gctgcttcta catatgtgga tagctatgta 900
taaaagcttc attttaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 952

<210> 680
<211> 2309
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c

<400> 680
gcangccccg sgggggcccgc cagcaccacc cgccctacca ccagcagcat caccaggggc 60
ccccgccccg cggcccggcg gccgcagcga ggagaagatc tcggactcgg aggggtttta 120
agccaatttg tctctcttga ggaggcctgg agagaaaact tacacacagc gatgtcgggt 180
gtttgttggg aatctacctg ctgatatac ggaggatgaa ttcaaaagac tatttgctaa 240
atatggagaa ccaggagaag tttttatcaa caaaggcaaa ggattcggat ttattaagct 300
tgaatctaga gctttggctg aaattgccaa agccgaactg gatgatacac ccatgagagg 360
tagacagctt cgagtgcgt ttgccacaca tgctgctgcc ctttctgttc gtaatctttc 420
accttatgtt tccaatgaac tgttggaaga agcctttagc caatttggtc ctattgaaag 480
ggctgttgta atagtggatg atcgtggaag atctacaggg aaaggcattg ttgaatttgc 540
ttctaagcca gcagcaagaa aggcatttga acgatgcagt gaagggtgtt tcttactgac 600
gacaactcct cgtccagtca ttgtggaacc acttgaacaa ctagatgatg aagatgggtc 660
tcctgaaaaa cttgcccaga agaatccaat gtatcaaaaag gagagagaaa cccctcctcg 720
ttttgccag catggcacgt ttgagtacga atattctcag cgatggaagt ctttgatga 780
aatggaaaaa cagcaaaggg aacaagttga aaaaaacatg aaagatgcaa aagacaaatt 840
ggaaagtga atggaagatg cctatcatga acatcaggca aatcttttgc gccaatgct 900
gatgagacga caggaagaat taagacgcat ggaagaactt cacaatcaag aaatgcagaa 960
acgtaaagaa atgcaattga ggcaagagga ggaacgacgt agaagagagg aagagatgat 1020
gattcgtcaa cgtgagatgg aagaacaaat gaggcgcaa agagaggaaa gttacagccg 1080
aatgggctac atggatccac gggaaagaga catgcaaatg ggtggcggag gagcaatgaa 1140
catgggagat ccctatggtt caggaggcca gaaatttcca cctctaggag gtgggtggtg 1200
cataggttat gaagctaata cttggcgttc accagcaacc atgagtgggt ccatgatggg 1260
aagtacatg cgtactgagc gctttgggca gggaggtgcg gggcctgtgg gtggacaggg 1320
tcctagagga atggggcctg gaactccagc aggatatggt agaggggagag aagagtacga 1380
aggcccaaac aaaaaacccc gatttttagat gtgatattta ggctttcatt ccagtttgtt 1440
ttgttttttt gtttagatac caatctttta aattcttgca ttttagtaag aaagctatct 1500
ttttatggat gtttagcagt tattgacct atatttgtaa atggtctgtt tgggcaggta 1560
aaattatgta atgcagtgtt tggaacagga gaattttttt ttccctttta tttctttatt 1620
ttttcttttt tactgtataa tgtccctcaa gtttatggca gtgtacctg tgccactgaa 1680
tttccaaagt gtaccaattt tttttttttt actgtgcttc aaataaatag aaaaatagtt 1740
ataatattga tcttcaactt tgccattcat gcttctatgc atattaggct acgtattcca 1800
cattgaaagc atgagagtgt ctaggccttt gaatggcata tgccatttct gggaaatgca 1860
tctggaggct aagtattgct ttctacaaat aattgcccc tttgttttaa aaagaagaaa 1920
tgcatattga agtagtttga tgatttgtt ggcatatagg aagcacgctg gtgctaagta 1980
tttttttaaa ggttatgtaa gcaaagctga actgtaaaatc ttcaggaata tgtattaa 2040
ttgtggaatg ggtgtaagac aattggtagg ggggtgaaagt gggtttgatt aaatggatct 2100
tttatggccc tatgatctat cttttacttg aaagcttttg aaaagtggaa aggtcatttt 2160
gttgcatctc cccatttctt gtttttaaaa gaccaacaaa tctcaagccc tataaatggc 2220
ttgtattgaa cttttacatt tgaattaaag atgttaaaca tgaaaaaaa aaaaaaaaaa 2280
aaaagggcsg ccgswcgcga tgctagaac 2309

<210> 681
<211> 451
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (419)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (428)
<223> n equals a,t,g, or c

<400> 681
aggccccctgc ccccaacttct tgcagcctca aaccctgcat tgggcatcct gtccccctctt 60
cagggttattc ctgtcacgtg gggccaaccc tgagctgcgg aacaaagagg gggacacagc 120
atgggaacct gactcccgag cgctccgacg tgtggtttgc gcttcaactc aaccgcaagc 180
tccgacttgg ggtgggaaat cgggccatcc gcacagagaa gatcatctgc cgggacgtgg 240
ctcggggcta tgagaacgtg cccattccct gtgtcaagggt gtggatgggg agccctgccc 300
tgaggattac aagtacatct cagagaactg cgagacgtcc accatgaaca tcgatcgcaa 360
catcacccan ctgcagcaat gcaagttgtt gttggaacga attgctctaa gcttccaant 420
tgcctgtgcc gggccaagct tcaagcaatc c 451

<210> 682
<211> 1298
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1294)
<223> n equals a,t,g, or c

<400> 682
agaggtttgc catggtggtc atcgcgasc cctgcagtcc tggmagccgc cgcgggaggc 60
tgaatccctg carcccatga cgggtggtgg tacagactac gtgttccaca atgacaccaa 120
ggtcgtcttc ctgtccccgg ctgtgcctga ggagccagag gcctacaacc tcacggtgct 180
gatcgagatg gacgggcacc gtgccctgct cagaacagag gccggggcct tcgagtacgt 240
gcctgacccc acctttgaga acttcacagg tggcgtcaag aagcagggtca acaagctcat 300
ccacgcccgg ggcaccaatc tgaacaaggc gatgacgctg caggaggccg aggccttcgt 360
gggtgccgag cgctgcacca tgaagacgct gacggagacc gacctgtact gtgagccccc 420
ggaggtgcag cccccgcca agcggcggca gaaacgagac accacacaca acctgcccga 480
gttcattgtg aagttcggct ctcgcgagtg ggtgctgggc cgcgtggagt acgacacacg 540
ggtgagcgac gtgccgctca gcctcatctt gccgctggtc atcgtgcccc tggtggtcgt 600

catcgcggtg tctgtctact gctactggag gaagagccag caggccgaac gagagtatga 660
gaagatcaag tcccagctgg agggcctgga ggagagcgtg cgggaccgct gcaagaagga 720
attcacagac ctgatgatcg agatggagga ccagaccaac gacgtgcacg aggccggcat 780
ccccgtgctg gactacaaga cctacaccga ccgctcttc ttcctgccct ccaaggacgg 840
cgacaaggac gtgatgatca ccggcaagct ggacatcccy gagccgcggc ggccggtggt 900
ggagcaggcc ctctaccagt tctccaacct gctgaacagc aagtctttcc tcatcaattt 960
catccacacc ctggagaacc agcgggagtt ctcgcccgc gccaaaggct acttcgcgtc 1020
cctgctgacg gtggcgctgc acgggaaact ggagtactac acggacatca tgcacacgct 1080
cttcctggag ctccctggagc agtacgtggt ggccaagaac cccaagctga tgctgcgcag 1140
gtctgagact gtggtggaga ggatgctgtc caactggatg tccattytgy caccaatytg 1200
acaaggcgat gacscctcag gaagcccaag ccttctgggt gcccaascgc ttgcaccatg 1260
aaaaacgctt gacggaaacc gactttactg tgancccc 1298

<210> 683

<211> 859

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (420)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (793)

<223> n equals a,t,g, or c

<400> 683

accacgcgt ccgctgcaac ttgagaaggc cacggctgag gccaaagatca agaaactgga 60
ggatgagatc ctggtcatgg atgatcagaa caataaacta tcaaaagaac gaaaactcct 120
tgaggagagg attagtact taacgacaaa tcttgagaa gaggaagaaa aggccaagaa 180
tcttaccaag ctgaaaaaca agcatgaatc tatgatttca gaactggaat gcggctaaag 240
aaggaagaga agagccgaca ggagctggag aagctgaaac ggaagctgga gggatgatgcc 300
agcgacttcc acgagcagat cgctgacctc caggcgacga tcgcagagct caagatgcag 360
ctggccaaga aggaggagga gctgcaggsg gccctggcca ggcttgacga tgaaatcctn 420
cagaagaaca atgccctgaa gaagatccgg gagctggagg gccacatctc agacctccag 480
gaggacctgg actcagagcg ggccgccagg aacaaggctg aaaagcagaa gcgagacctc 540
ggcgaggagc tggaggccct aaagacagag ctggaagaca cactggacag cacagccact 600
cagcaggagc tcagggccaa gagggagcag gaggtgacgg tgctgaagaa gccctggat 660
gaagagamgc ggtcccatga ggctcaggctc caggagatga gccagaaaca cgcacaggcg 720
gtggaggagc tcaagcaacg agctggccac agagcgcaca cgggcccaga agaagagag 780
tgcccgagc cancttcgag cggcagaaca aggagctccg gagcaagctc cacagagatt 840
ggagggggcc gtcaagtcc 859

<210> 684

<211> 1251

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1249)

<223> n equals a,t,g, or c

<400> 684

```
ggcacgagga gcctctccta caagatgact cataagccca gtgtggggta atatacagag 60
gtccaggagc gtgcctcttt tcccctctgg gcttgtgttg ggtggcattt gggcacgagg 120
gcctcttcta gccctcctag ctagcttcaa catcataagc gtcttgaacg cagagtgtta 180
cctgaaacag attttacatc ctacttctca ttttacagtt tcagagactc ctccactctc 240
tgggaatgac acggactccc tctcctgcga cagtggcagt tcggcaacta gcactccgtg 300
tgtgtccgcg ctggtcactg gccaccacct gtgggccagc aagaatggcc gccatgtcct 360
gggcctgatt gaggactatg aggccctgct caaacagatc agccaggagc agaggctcct 420
tgctgaaatg gacattcaaa cccaagaggc tcccagctcc acaagtcaag agctgggaac 480
aaaggggtcca cccccagcac cactgagcaa gtttgtgagc agtgtgagca cggccaagct 540
gaccctggaa gaggcctaca ggcggttgaa gcttctcttg agagtctcac tccccgagga 600
tggccagtgc ccccttcact gtgagcagat tggagaaatg aaggcagagg tcaccaaact 660
acataaaaaa ttgtttgaac aagaaaagaa gttgcaaaac accatgaagc ttttgagct 720
gagcaagcgc caggaaaaag tcattcttga tcaattgggtc gtaaccacaca aaatccttcg 780
gaaggccaga ggaaccttg agcttaggcc tgggggagcc catccaggaa catgcagtcc 840
cagcagacca ggctcctgag aagaactttc agccaataaa gcttgtgctt cccccaccga 900
gctcacgctg tctctttggt ccaagtgtgg ttccctattta ttgaggaaga aagagctgtc 960
tggccaaagg aaatctattt tttcccttca tgttttctct ctgaaagttg gcttgagagt 1020
tgttgtcaga aaggtgcagg tgctccacaa acgggtggta aaaaggcctc gagctcttgg 1080
atgttgtatt tcagatcagg ggcaggcacc ggagttgagg ctgtgagcct tgggtgggctt 1140
cacgtcttcc cctggatttg cttagtactc agccagtgcc acagtttgaa gattctcatt 1200
aatgattca tttcatttca aaaaaaaaaa aaaaaaaaaa aaaaaaaant a 1251
```

<210> 685

<211> 2600

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (38)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (57)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (476)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1905)

<223> n equals a,t,g, or c

<400> 685

```
cgcaacctat gcaagggtgg tccaaaaagc ccaagctnaa gccaaagctgc ctcccgnact 60
cccctcgacc ccagggtgca agaggacgtg gtgaatggcg ttttccccag gtcggaagac 120
ggaaagaccg gaggcagtag ctgcaaagcc cttggaaaca ccctggatgc tgttgagggc 180
caagagatct gtgtggctcc tgggcccggc gagtggcagc agccccctt gccccacctc 240
ccccctcccc taccacaacc tgccctgccc caccacacct cacagctact cagtggggct 300
ggcatcaagg gagacaccag tgggtgcgtt ataattggct taaagggatg gacttgtgat 360
tggctgcagg aagaaacttt tttattttt aaatcttgac caacagaaac cttttatttt 420
tatttctgac tcttattttt taaaaaattt gcgcctcggc atctggcttc cctggnaact 480
ctccgagctc tgggtgctta gttaggtcat ttttttagaa atgtgaagag gtctgattgg 540
ctgcttaaac tggaaaggga ctgtgattgg ctggttaatg ggaaacgggt tttttctttg 600
gctgcagggtg ttctgctgat atcaacagct tccctatttt gaatgcagaa aacagggtct 660
gggacattag tcgttatatt tgacttgaaa agaaagaaac caagtgcgct ttgcaatatt 720
tattacacaa agaacttgct gctgccttca catttggggg ttgtgtttga ttggctttcg 780
atgctgtgtt ttggtttccc attggttcac ctgtgactcc tgttgccatg gattcacccc 840
cctctgctgc cggctctggg cctgagggtc cacctggaga gtacatttgc tttaatgagt 900
gcacctgcct ccaccagcaa ggggaccccg agaaccctga gcagggtcca cagctggaaa 960
gttgggcccc tgaggagctt tgtgtcgtct tgaacgagca gccaggggcc tagaggtaac 1020
cgttagcggg atttatgtgc actgcctgca tgagctggca accagccacg tcccttggtg 1080
agaaagggat tgctgaggca ccgtccaggc cccaccggcc aggccgcgcc cagcagaggc 1140
gtactaccca gctctgtcct cttggccatc cttctgtgta ccacttctg aggcctcatt 1200
ttgggggtca tcttgaaaag gggaggagct tctcccagtg tgagacccca aagactctgg 1260
aggtcatctg gcggaggtct ctgggagccc agaaccacaa taaaagcccc agcttggtct 1320
cacaaggccc agggagacct ccagctaaac accaaccctt gacctacccc agccaggctc 1380
ctacctgtyt gctgccagca cagtaggtcc cggccagctc tggagttctc tcatcgagg 1440
cccatgccct ccactccact gcctttggaa gggctctctc ccaggtcagc ctggaaggga 1500
cagtatcgtt tgtttatgaa atgccactgg gacagctggc tgggccttca ccaagcaagt 1560
cccttcagac tggcccttaa gccaaactca ggcccagaat tgcagttcag aatggcagtc 1620
ctggaggcag ggggtgaggg gcaggcttag tgttcctgca ccaaacctaa gtccttccac 1680
ctgccacccc cttccctggg agggaggtgg tcctcctatc tccctggctc actggcaggt 1740
gtgggatctg gggagagcgg ctggagaaa atgcagtcct caggaagggg gccgccaccc 1800
tccccatagc tggtagatgc tgaggccctt aggtgcccag ggccagtggt accctctcag 1860
aaccaaatct tcccccttct tcggggcttg gggctcgggc cgtangggct cctgagtgct 1920
atgaagtgca caggagccaa atgaccgagc cctggagagc cccatggtgg gtaggtggtt 1980
cgtgctgtgc tctggcacca tcagcctggt ccagaaggag gattcgagca tcaggctaag 2040
accctgtgtc ctccaccatg cactcacccc tagccctggt tagctgacag tcagctgtgg 2100
ggaacacagc tacaacccta ccctggcagg gacctgagag catctcagga ggggcagcgc 2160
atgtgtgcat gtgctgtgtg agtgagcaca cccgtgtgca cactcataca catgtgcaca 2220
cacacgcact ctccccrctc aggggccttg aggtctggct gagccccctg ggaaagggtga 2280
gttctttcat ctccctcctc caggtcggag tgccctggag caggtgtcga ggccacattg 2340
ctggctgccc cctctttgta gtcctataa agggcccaca cctggtggat acctggttga 2400
gcgtgtggtc tctgccccag cctgtccttg tcacgatcac aggccttget tttgtaacaa 2460
tgatgacccc ggctgtctc atcttctgaa gaggaaaagt caaagtgttg ctgtggctcc 2520
atatttcaac taaaaatata tctgttgagg aaagaaatta acaataaaga attttcatag 2580
gttaaaaaaa aaaaaaaaaa 2600
```

<210> 686

<211> 4641

<212> DNA

<213> Homo sapiens

<400> 686

cagcagcggg atggccctag cagtggcggc ggstgcagaa gccaagcag cgcggccgca 60
gtggaggcta gagccggagc ggcggcggcg gcggcaccac ggggagttta agatggcggc 120
gggggggaca gggggcctgc gggaggagca gcgctatggg ctgtcgtgcg gacggctggg 180
gcaggacaac atcaccgtac tgcattgtgaa gctcaccgag acggcgatcc gggcgctcga 240
gacttaccag agccacaaga atttaattcc ttttcgacct tcaatccagt tccaaggact 300
ccacgggctt gtcaaaattc ccaaaaatga tccctcaat gaagtccata actttaactt 360
ttatttgcata aatgtgggca aagacaaccc tcagggcagc tttgactgca tccagcaaac 420
attctccagc tctggagcct ccagctcaa ttgcctggga tttatacaag ataaaattac 480
agtgtgtgca acaaacgact cgtatcagat gacacgagaa agaattgacc aggcagagga 540
ggaatcccgc aaccgaagca caaaagtatt caaacccggg ggaccatag tagggaaaag 600
agtgcataatt cggaaaagcac ctcaagctgt ttcagataca gttcctgaga ggaaaaggc 660
aaccatcatg aaccctgcaa atacaattcg aaagacacat agcagcagca ccatctctca 720
gaggccatac agggacaggg tgattcactt actggccctg aaggcctaca agaaaccgga 780
gctacttgct agactccaga aagatggtgt caatacaaaa gacaagaact ccctgggagc 840
aattctgcaa caggtagcca atctgaattc taaggacctc tcatatacct taaaggatta 900
tgttttttaa gagcttcaaa gagactggcc tggatacagt gaaatagaca gacggtcatt 960
ggagtcagtg ctctctagaa aactaaatcc gtctcagaat gctacaggca ccagcckttc 1020
agaatctcct gtatgttcta gtagagatgc tgtatcttct cctcagaaac ggcttttgga 1080
ttcagagttt attgatcctt taatgaataa aaaagccga atatctcacc tgacgaacag 1140
agtaccacca aactaaatg gtcatttgaa tcccaccagt gaaaaatckg ctgcaggcct 1200
cccrctgccc cctgcggctg ctgccatccc yaccctcca ccgctgcctt caacctatct 1260
gccatctca catctcctc agattgtaaa ttctaactcc aactccccta gactccaga 1320
aggccggggg actcaagacc tacctgttga cagttttagt caaacgata gtatctatga 1380
ggaccagcaa gacaaatata cctctaggac ttctctggaa accttaccac ctggttccgt 1440
tctactaaag tgtccaaagc ctatggaaga aaaccattca atgtctcaca aaaagtccaa 1500
aaagaagtct aaaaaacata aggaaaagga ccaataaaa aagcacgaca ttgagactat 1560
tgaggaaaag gaggaagatc ttaagagaga agaggaaatt gccaaactaa atwactccag 1620
tccmaattcc aktggaggag ttaaagagga ttgcaactgc tccatggaac cttcagcaat 1680
tgaactccca gattatttga taaaatatat cgctatcgtc tcctatgagc aacgccagaa 1740
ttataaggat gacttcaatg cagagtatga tgagtacaga gctttgcatg ccaggatgga 1800
gactgtagct agaagattta tcaaacatga tgcacaaaaga aagcgccctt cccaggctc 1860
aaaagagtat cagaatgttc atgaagaagt cttaacaaga tatcagaaga taaagcagtc 1920
tagtcccaat taccatgaag aaaaatacag atgtgaatat cttcataaca agctggctca 1980
catcaaaagg ctaatagggtg aatttgacca acagcaagca gagtcatggt cctagaactc 2040
tgcttgagac agaagatgtg aataaactta agcttattta tttaaaattc caaatgagtt 2100
gctctagatt ctaaaaaggg gaaacttttg ctgttgaaaag tttcagatatt agtaaacttg 2160
agttactttt tcttttccat ttacttttgc ttccctgcat ttcgaagctg ctctttcttg 2220
tcctccccac caccacccc ccaagacttg tgtttggtta tagaaataat ttttttaggt 2280
attggggatc cattgtctat atttcaaact agtttttttt cctcaaaaac ttgtgtttgt 2340
tattagaaat gattttttag atattgggga tccagtgtcc acacttaaaa gttgtatgtg 2400
tttaaaaaac aacaacagta atgtgcaagg tgaaatgctt ttggataaac gtaagcctat 2460
tttctgacgt ttcttaatgc aaactcttgg ccttaaatgg tagaatattt agaaatttgc 2520
acaaaattaa aaaaataaac attgtcttgg aggggttaaaa aatagaaagg tgtatgtgta 2580
tagattcaca tacacatatg tatatacagg ctgacttgat ctagaacatt aaatccgccc 2640
tgcaagttaa cccccattg caatgggttg cttaaggtgt ttgctagtgt tgtacatagt 2700
gtgggttaatc attagctaca ctgcttccca ctgtattaga gcaatgggaa gcatactgtg 2760
gcctaccagc atctggaagt gtgtgctcga tctgtatgtg tgcagagggt gtgtggatgt 2820
gagcgtgcat gaaggaaaaa aagctgctac tcctagtagg ccaaacgctc aggttaaaaca 2880
actgacgagt gttactgtag ggtgtttttt tggttttttt ttttttttct tctatcaaat 2940

tgctactttt gttgtggaag acaaaagcat ttccatttca acgagtttgt cagctttatt 3000
aatgttgggc aaaaattgat atgtcatgaa aatgaaacag atctatagtt ttgggacaaa 3060
attataaaat gaaatgtgta ggtaacctat ttatatactg ctataaagta ttttttgaag 3120
agagatatgc aaagaagcta ttacctacat aagaggtata tttaaagatt ttttttttca 3180
tcctggtgcc aggaatataa aaaagagtgg atatatattaa ccataacata ctgtgattca 3240
tcaaacagca caaactttca tttcatggag tttatctggt gacattgatt taaactgtca 3300
cttgttttat catgtgggaa cataagttat gtggtcaaaa atataaggat tttgaattaa 3360
tgttgattca agttgtattg tcttattgta ttgtcttttc aaagtgtctc cagttgaaaa 3420
gggaagcatt atgtttacaa atctgttttg aaatgtttgc caaaattttg gtagtgtctt 3480
taataaagat gtttgtctcc agcatccaga aaaataaatg aataactttg ttgtgtatca 3540
ctgtaaacca gaaaaatgtt gggtatctag aaaacttgag agagcatgta gattaacttt 3600
tctctttgga gttctaaaaa attaactgga aagattagat aatatactaa atgtatacag 3660
aagtatacag actatacaaa gactgaaaca agtccctttt gcactacaac tctataacat 3720
taccgcagaa attttggttc tatgtagcat ggacctccta aggaattctg tttcttttag 3780
cattgagatc cctggtgctc tttttttacc tcagaattgg tacaatcatt attaaacgtt 3840
aatttatttc aaacttttta attgaaaaaa ggaaaggga acttaattgg ggataaattc 3900
aggcatcata ttattatgat agagtctcct gagtgggtcg tctataggta atgaactcat 3960
tggtgttatt tcttgacat cttggccttt taatcaaaga ctgtgtgctg ctatttgcta 4020
tgagcaaggt ttctcaaaag caaaagggtc ttggaccatt tggatcacct gagttagaat 4080
ctctaggtat agggccarg tatctgcatt ttcacagggt tcttgtaggt gactttctgc 4140
aagctaaagt atgagaacca ttggcttgga tgtagttcta aacttttagg tctgtaaatc 4200
ttgaaatctt gaactgaagg tcaactattg gctttttttt tttttttaat gtccatcatg 4260
tcagcaggtg caaatcactt ttcccctttg catgatctga ggcacctcct cagttgtttc 4320
actgccaaact cttttttcag aacctgttta caaacaagcc ttccagttgg tgaatggtta 4380
gccattggag ctccctaccct gtacatcagc acatcttctg gtttacaagt tgggtaacaa 4440
tgaaagctgg agatrctaaa tggaaatcca gcattgcata cccttagacc tgatcacata 4500
ccagtaaaag ccttaattta gatgttagtt gtatgtgtg gacagatcct tgcaaaagtg 4560
tgctgtctat tagttgtaaa ttttgaaaat cataaatctc tgaatctgct actatccaag 4620
tttcatccct tttgaagact a 4641

<210> 687

<211> 400

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (370)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (380)

<223> n equals a,t,g, or c

<400> 687

cggctccttgg gggggctttg agctctccag actgtgccct taccgccttc cccgccacac 60
ccgctctgtc ttcccactgt cccccccatc ccgggcaggg ccagtgaggg ttgagggggc 120
tgggtccccc aggacacggg ccagaaagag cccacagggt tctgtcatct tccamcgcac 180
catacctgga gccctccgag ggggtgcagg ggaaacaggg caccgccaaa gccatggccc 240
gccgccgaaa gccacggccc caccgcacc tcctcaccca tccagcctga cccacgggc 300

ctctcctcct ccttgccgct gktgtgggca rtcccctgtc cgccccaaaa cgggcttggt 360
ccctggccan gcttgaaaaan aatttgggca aggaaaaaggc 400

<210> 688

<211> 2751

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (528)

<223> n equals a,t,g, or c

<400> 688

accacgctcg tccgccacgc gtaccgggtcc tacttcactt ttattggaag agttgctggt 60
ctggccgtat ttcattgggaa gctcttagat ggtttcttca ttagaccatt ttacaagatg 120
atgttgaggaa agcagataac cctgaatgac atggaatctg tggatagtga atattacaac 180
tctttgaaat ggatcctgga gaatgaccct actgagctgg acctcatgtt ctgcatagac 240
gaagaaaact ttggacagac atatcaagtg gatttgaagc ccaatgggtc agaaataatg 300
gtcacaatg aaaacaaaag ggaatatatc gacttagtca tccagtggag atttgtgaac 360
aggggtccaga agcagatgaa cgcttcttg gagggattca cagaactact tcctattgat 420
ttgattaaaa tttttgatga aaatgagctg gagttgctca tgtgcggcct cgggtgatgtg 480
gatgtgaatg actggagaca gcattctatt tacaagaacg gctactgncc aaaccacccc 540
gtcattcagt gggtctggaa ggctgtgcta ctcatggacg ccgaaaagcg tatccggtta 600
ctgcagtttg tcacagggac atcgcgagta cctatgaatg gatttgccga actttatggt 660
tccaatgggt ctcagctgtt tacaatagag caatggggca gtcctgagaa actgccaga 720
gctcacacat gctttaatcg ccttgactta cctccatatg aaacctttga agatttacga 780
gagaaacttc tcatggccgt ggaaaatgct caaggatttg aaggggtgga ttaagcacc 840
tgtgcctcgg ggggtggtgt tcttcaagca agttctgctt gcacttttgc atttgcctaa 900
cagacttttg cagaggcgat ggcagagagc agctgcaggc atgggtccctg gagccgagcc 960
ttcaccacgc actcgtccaa gttcggatgc gggaaacctg tcccagcttg agttcctgcc 1020
tttcccacca caaattatca actggttgat gtgtacacta attacatttc aggaggactt 1080
aatgctattt atgttgtgcc tctgcagcaa agcccttaat aaatatttta catcctttct 1140
aatgacaatg aatggaatta atcactcaac aggtatagta ttacgactca tgtttacttt 1200
ttaaaatgat ttagaccgat ttccagatgt tatttcgtta tgattaaaga tgtctcatgt 1260
acttgaaaaa gtgagcattt tttttttttt tktattttca ctttcatacc aggcttaatg 1320
tcaatgacat ttttattttt gaagtactct gacacctcca ccctctactt tattagaatt 1380
ggaaggcaaa tttttgtcca aaaacctaca gacaagtact ttgagagaat ttccaatata 1440
atattagaca taatgataat tttttccata ctccagaatga aaaactggat attacgtttt 1500
tkttttgggg tttttttgta caaatttagc taatagctac aggtgagag aattgtaaca 1560
tagcatgaca aattttgtgt tgacttgaaa ggaatcacac cattattcct tagaagtaat 1620
tacatgtgtt ctaacacatt tgagacaggg ttggactccc atttctcatc cgagaaatta 1680
cttaaccctt cctgggcgct gtacagtcac cttttattct atttctctct tgctgtttgt 1740
agtagagaca ttttgaatga aacttggcac tgcttgattc aaaactgttg aaaccagatc 1800
tgttttagtct cctgtttgta tgcgtttgct aatggtagct aaataaccag tttttgttgt 1860
aaatgcacca attctgaagg cactttatgt actacatgga ggtcatatct ggttttgttt 1920
ttattttttt atcatgaaca ttaaatgtga tgatgatttc ttttcctgc acacatcttt 1980
ccggtgcaat atctatcaat tgtgaatctg gctgctggtg tataaaaacc tggatgtaaa 2040
gctgagccta cagacctgtc ctaccaact gttttgtgat ttctactcaa ctacaaagat 2100
ttatttaatg tactcttaat ctaactgagt tttgttacca atgacctgtt gcatgcttca 2160
ataccgtgta ctgcctgagt tgtgcctctt gtgtgctaga ttaaaagtga gacagagact 2220

```
tgacttgatc ctctgagctc aagctattga gctggtagtg gcagaggact gagggtagct 2280
gcacagtttg attcttttcc acgtgtaagt ctccattgca gaattgtcgt gctttgagaa 2340
aacacctgag gcagtggtgg agttgaacga ccctgctgtc ctttttaacc tgtgtgtgcc 2400
tagamcctgt cggggcagtc aggggacact agagatttga tctcatgcga gtcatacaata 2460
ggacaaaaaa gttgtggttt ggggaggtct gtttgttaca taaaaaggac ctttcggtgt 2520
aagaaattgc cgtttttacc ctgccctggc tggcatgtga gaagccatgg aaggttgtgg 2580
ttgtaaatga gttgtctaaa ggggtgcaga ggcctgaggt ttctaaaaga aggtagattt 2640
ctacagagct gagtggttgg tcctttttct tattggttga aaattacctg gtagtgatca 2700
gaaaacttag atgctatgta actaaaaaaa aaaaaaaaaa aaaaaaaaaa a 2751
```

<210> 689

<211> 969

<212> DNA

<213> Homo sapiens

<400> 689

```
caggcgagct cggcggtcgg crtggggggc gctatgcggg gcggcacgtt tctcgagtcc 60
gggcattgta caagcgcgtc ttgcagctgc accgtgttct gccccggac ctcaaatacc 120
tgggcgacca gtacgtgaaa gacgaattta ggagacataa gaccgttggg tctgacgagg 180
cacagcgttt cttgcaagaa tgggaggtgt atgcaacagc gttattgcaa caggctaacc 240
aaaacagaca aaattcaact ggaaaagcat gttttggcac cttcctccca gaagaaaaac 300
ttaatgactt tcgtgatgaa caaattggac agttgcagga gctgatgcaa gaagccacaa 360
aacccaatag gcaatttagt atttctgagt ctatgaaacc aaaattttag tctatacaac 420
aaagcttaat aagacatgca aaaatttaga acccctactt taactgtcat tggtttttga 480
aatatattta agctttgaaa acacctgtta ttaatgaaat actcttttat tttggatatt 540
atgattgcag tatatggatc aagatcacta gtgacaattg aaaaaacta ttggaataat 600
agcacttgta taaaattcag ttttggaaact aaacagcaaa tttctagaat tttgctgaaa 660
atgtttttaa atgctattct catccagcca tattagtctt ctggcttttc ttagcttca 720
tcaaataagc atgttgatga aatgatagat gtacaattcc aacaagggtt ttatttttta 780
aatacattgt cattytgaac attttatcac ttctagttta ataatacata catgattttt 840
cttctgaatg tctcttctcc ctgcatactt gttcattcac aatgaaagggt taggaagaag 900
ctttaaaatt cactatttta ctatcaatca tttgtataat aaactatata aagtataaaa 960
aaaaaaaaa 969
```

<210> 690

<211> 979

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (376)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (943)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (945)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (957)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (959)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (969)

<223> n equals a,t,g, or c

<400> 690

```
tgtgcctgcg ttcgggaagg gcagactgtg taccagcaag tcctgtccct gggagcgccc 60
aagtgtcctc cgcagctgga actggggcct gtgtgggtac ttgtctttct accatgccc 120
ctatccccga gcctggactg tctatcagct tcctggccaag aatgtcacc tcacctgccg 180
tcagatcaca cccatcttgc cccatgacta ccaggacagc agcctgcctg taggagtctt 240
tgtgtgggat gtggaaaatg aaggggacga agctctagat gtgtccatca tgttctccat 300
gcggaatgga ctgggtggtg gagacgatgc ccaggggggt ttgtggaatg agcccttctg 360
tctggagcgt agsgngngaa actgtccggg ggctgctcct gcatcatcca acccttccaa 420
acccctacac gatggctgtg gctgcacgag tcacggcagc taccacggta acccacatca 480
cagcctttga ccctgacagc acggggcagc aggtgtggca ggatctactt caggatggac 540
agctggactc tccactggc caaagcacc ctacgcagaa aggagtaggc attgctggag 600
ctgtgtgtgt ttccagcaag ttgcgacctc gaggccagtg ccgcctggag ttttctactg 660
cttgggacat gccaggatc atgtttggag ctaaaggcca agtccactac aggcgggtata 720
caaggttctt tgccaggat ggagatgcag cacctgccct cagccactat gcaactgtgcc 780
gatacgcaga gtgggaagag aggatctcag cttggcagag cccgggtattg gatgacagat 840
cactgcctgc ctggtacaaa tytgcgctgt tcaatgaact atacttcctg gctgatggag 900
gcacagtgtg gctggaagtt cttgaggaca tccaggataa agntntcttc tatcctnanc 960
ggggccaana agcctatga                                     979
```

<210> 691

<211> 693

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (27)

<223> n equals a,t,g, or c

<400> 691

```
cgtggggccc ccggttgccg cccctnnga aaaaggcatt gctggctctg aagaagcaaa 60
gtagcagcag cacaaccagc caagggtggt tcaaacgctc actatcagag cagcctgtca 120
tggacacagc cacagcaaca gagcaggcaa agcagctggt gaagtcagga gccatcagt 180
```

ccatcaaggc tgagaccaag aactcaggct tcaagcggtc tcgaaccctt gaggggaagt 240
taaaggaccc cgagaaggga ccagtcacca ctttccagcc gttccagagg agcatatctg 300
ctgatgatga cctgcaagag tcattccagac gtccccagag gaaatctctg tatgrgagct 360
ccctcgctgt ccagaacagc cctaagggtt gccaccggga caagaggacc cagattgtct 420
acagtgatga cgtctacaag gaaaaccttg tggatggctt ctagggaaca gagctggatt 480
ccttgtgcct catatgcccc aatgctggtc tcagtaaaac actgagggtg aagcttacac 540
atctccctca gcctctggtt tttcagcact tgggattggg gttaaacctt taaaaacggc 600
tgtcagggtt gatctcagtg taacaacatg gccagtgcct gttccccact cccttgcccc 660
aaaaggattt ggaacccaaa aaaaaaaaaa aaa 693

<210> 692

<211> 1382

<212> DNA

<213> Homo sapiens

<400> 692

gcccactcgc tgcggcgctt ctggctccag accgccctcc ggatcggacc ctgcgaatgg 60
ttttggctat atcttcatgc tgggcttcac caccaggcct cctcacagat tcctgtccct 120
tctgtgtcct ggactccgga tacctcaact ctcatgactt tgtgtcagc ccaggcccag 180
agccatggct atctctctt cctcctgcga actgcccctg gtggctgtgt gccaggtaac 240
atcgacgcca gacaagcaac agaactttaa aacatgtgct gagctggttc gagaggctgc 300
cagactgggt gcctgcctgg ctttctgcgc tgaggcattt gacttcattg cacgggaccc 360
tgcagagacg ctacacctgt ctgaaccact ggggtggaaa cttttggaag aatacaccca 420
gcttgccagg gaatgtggac tctggctgtc cttgggtggt ttccatgagc gtggccaaga 480
ctgggagcag actcagaaaa tctacaattg tcacgtgctg ctgaacagca aaggggcagt 540
agtggccact tacaggaaga cacatctgtg tgacgtagag attccagggc aggggctatg 600
tgtgaaagca actctacat gcctgggccc agtcttgagt cacctgtcag cacaccagca 660
ggcaagattg gtctagctgt ctgctatgac atgcggttcc ctgaactctc tctggcattg 720
gctcaagctg gagcagagat acttacctat ccttcagctt ttggatccat tacaggccca 780
gcccactggg aggtgttgct gcgggcccgt gctatcgaaa ccagtgcta ttagtgga 840
gcagcacagt gtggacgcca ccattgagaag agagcaagtt atggccacag catggtggtg 900
gacccctggg gaacagtggg gggccgctgc tctgaggggc caggcctctg ccttgcccga 960
atagacctca actatctgcg acagtgcgc cgacacctgc ctgtgttcca gcaccgagg 1020
cctgacctct atggcaatct gggtcaccca ctgtcttaag acttgacttc tgtgagttta 1080
gacctgcccc tccccacccc accctgcccac tatgagctag tgctcatgtg acttgaggc 1140
aggatccagg cacagctccc ctcaacttga gaaccttgac tctcttgatg gaacacagat 1200
gggctgcttg ggaaagaaac tttcacctga gcttcacctg aggtcagact gcagtttcag 1260
aaaggtggaa ttttatatag tcattgttta tttcatggaa actgaagttc tgctgagggc 1320
tgagcagcac tggcattgaa aaatataata atcataaaaa aaaaaaaaaa aaaaaaaaaa 1380
aa 1382

<210> 693

<211> 3098

<212> DNA

<213> Homo sapiens

<400> 693

caaataggca aaataacact ttatcattat cattggctcat atacctagtg catttgtcta 60
tgatatgttt ttgagtatat gacactgaaa tattagtgtg tctatgatac taaatcattt 120
ttatatggct aaaatcatct tcagtaagaa ctctcttagg atatgaattt aagtgaatat 180
ttactgtctt ttttttaaaa catgatgaaa cagtaatcta tagagcaatt tcattagtat 240

atgtgagtaa tgatgggtta gttactcta caggctgggt aagggtcat aagaaagctt 300
ctaaagctct gtgctttgtg ttcctctgtg aatgtccatt ctacttctct ttctaataat 360
gcatgctttt ctttttgtaa acaaaatgtt gacttcatgg atcaattaaa gagaattgta 420
aaaacctaata ttggcttcag ttaacagtta aaaaaaaccc cttcaattgg aagaaaaaaa 480
aatttaattc atagatttca atccacacaa aatcatgtcg tcttctctgt ttacacctaa 540
tgrctaacct taatctctaa accattaatg ggggtattct aatttctgtc ttcttttctt 600
ttttcttctt gcattccatg ttgtctgtgg tggtttgtgt ggttggtgact tcccctgggtc 660
agtattttta tttccaggag gtgttccctg tcttggtgctc aaagcactgt atcatgcagg 720
ccaatgctga gtaccatcag tctatcctgg caaaacagca gaagaaattt ggagaagaaa 780
ttgcaagggt acagcatgca gcagaactga ttaaacaggt ggcatctcgc tatgatgaat 840
atgttaatgt gaaggatttt tctgacaaaa tcaatcgtgc ccttgctgca gcaagaagg 900
ataatgacct ctttatcat gatcgagttc cagaccttaa agatctagat cctattggca 960
aagccacact tgtgaaatct accccggtca atgtaccat cagtcagaaa ttactgata 1020
tgtttgagaa gatggttccc gtgtcagtag agcagctctt ggctgcctat aatcagagga 1080
aagccgattt ggttaacaga tcaattgctc agatgagaga agccaccact ttggcaaatg 1140
gggtgctagc tttccctaat cttccagcag caattgaaga tgtgtctgga gacactgtac 1200
ctcagctctat attgactaaa tccagatctg tgattgaaca gggaggcatc cagactgttg 1260
atcagttgat taaagaactg cctgaattac tgcaacgaaa tagagaaatc ctatagtagt 1320
cattaagggt gttggatgaa gaagaagcaa ccgataatga ttttaagagca aaatttaagg 1380
aacgttgcca aaggacacca tccaatgaac tgtataagcc ttttaagagca gagggaacca 1440
acttcagaac agtttttagat aaagctgtgc aggcagatgg acaagtgaac gaatgttacc 1500
agtctcatcg tgacaccatc gtgcttttgt gtaagccaga gcctgagctg aatgctgcca 1560
tcccttctgc taatccagca aagaccatgc agggcagtgga ggttgtaaat gtcttaaaat 1620
ccttattgtc aaatcttgat gaagtaaaga aggaaagaga gggctctggag aatgacttga 1680
aatctgtgaa ttttgacatg acaagcaagt ttttgacagc cctggctcaa gatggtgtga 1740
taaatagaaga agctctttct gttactgaac tagatcgagt ctatggagggt cttacaacta 1800
aagtccaaga atctctaaag aaacaggagg gacttcttaa aaatattcag gtctcacatc 1860
aggaattttc aaaaatgaaa caatctaata atgaagctaa cttaagagaa gaagttttga 1920
agaatttagc tactgcatat gacaactttg ttgaacttgt agctaatttg aagggaaggca 1980
caaagtttta caatgagttg actgaaatcc tggtcagggt ccagaacaaa tgcagtgata 2040
tagtttttgc acggaagaca gaaagagatg aactcttaaa ggacttgcaa caaagcattg 2100
ccagagaacc tagtgctcct tcaattccta cacctgcgta tcagtcctca ccagcaggag 2160
gacatgcacc aactcctcca actccagcgc caagaacat gccgcctact aagccccagc 2220
ccccagccag gcctccacca cctgtgcttc cagcaaatcg agctccttct gctactgctc 2280
catctccagt gggggctggg actgtgcgc cagctccatc acaaacgcct ggctcagctc 2340
ctcctccaca ggcgaggga ccacctatc ccacctatcc aggatatoct gggatttgcc 2400
aatgcccacat gccatgggc tataatcctt atgcgtatgg ccagtataat atgccatata 2460
caccagtgtg tcaccagagt cctggacagg ctccataccc gggaccccag cagccttcat 2520
accccttccc tcagccccc cagcagctct actatccaca gcagtaatat gtctgctcag 2580
cagctcagct gattcagatc agagggaaa aaataccaac cctgcaataa gtgtactaaa 2640
ctctacgctc tggttaatgt aatgtactct cctggactga atgcagtgt taatttctgt 2700
ctacagctag aagctgtgcc ccagttccac atttgattac acatgtgaga tttgctgctg 2760
ttgcagtata aacactaggt ataataggat ttgaaattgc attacagttc ataaaaattg 2820
aaaatgagaa attaaacctg caagtgaac atttgaaacg attatacttt ctacataaga 2880
catggttggg acatcagata cttacaaaga tggtttaagt atggatacta gagaaaatta 2940
agttttcttt ctctttggtt tattgatttg gtttaatttc cattatgcta ttttgcataa 3000
tcaaggcact gtaaatctta taattttaaa ataaattact taagaacaaa aaaaaaaaaa 3060
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagg 3098

<210> 694

<211> 489

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (418)

<223> n equals a,t,g, or c

<400> 694

```
gaaagtctac ccgcctcctt gtgacagaag tgcgactgcc agctgccgag gcgttcggtc 60
ctgctgtttgc ggccgctgcc ccagggtgc ggggacgctc ccggagccct gcctgttccc 120
tgtccatcca ggccagcagc tgaaggagcc tcacctgcct cccttctctg agtagcacgg 180
atttraggag aagcagcgaa gatgtccagc gaggctcccc ctcttatcc tgggggcccc 240
acagccccac ttctggaaga gaaaagtgga gccccgcca cccaggccg ttcctcccca 300
gctgtgatgc agccccctcc aggcattgcca ctgccccctg cggacattgg cccccaccc 360
tatgagccgc cgggtcamcc aatgccccag cctgggttya tcccaccama catgagtnca 420
gatgggmact acatgcctcc gggtttttta cccttcttca ggggccccca cccacccttg 480
gggtaatta                                     489
```

<210> 695

<211> 1844

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<400> 695

```
gccactaagc tgnctgctgc gcgcctgcag gtcgacacta gtggatccar agacaaaatg 60
gaaattttaa tgacatccta gaggtagaga aaccgtggag atcgcttttc tcagactcac 120
caacttttaa tgggatttca tggggtttgg ttgtgctgat agggtaaggg gaggctgctt 180
tctgcccttc tccccactcc catctgattt acttaattca gtctcagctg ctgaaatttg 240
gaaaggacca aattgcttta cagttttttt ctttgtgtag tatcttgaaa tcctggaaaa 300
ttctatggaa tagttctgta tatagggcac aagtaaaggc attgtccaaa gtttatattat 360
ttatttatta ccctaagaat gctttgccat aaccacattt aatgggaaaa acggcagtat 420
cacagatgta aattaactca ccagatttac tgggcctgaa ctcatctctt tcttgctata 480
tgatttagca agttctagaa ggtctccaag acaataatta cattggcaca atgtatactt 540
cagtgtcac ccgtaggcaa atctcttttt aaaaaactct ttggtgcaca agtaacacat 600
ttggccacaa aacaccaaag aattgtaggc agtggccctt attgagaagt tttccggtag 660
agttggaaat cagttgtgaa tacattcttt gctagtggga gtgcttggtt actaagcatg 720
tgccgtcgta ggtattagtg ctagtctcaa atagggtgctt cccctgaggt gcaggggaag 780
accaaagtgt gcaactcgaa ctgctttcgt ccatgtttct cacattgctg tatttttagaa 840
aataggggtt aagactgata acaacctttt acattgtgac tgtgtttgca ttgtctaattg 900
acagataaat ccttaacatt tctctccacc ttagtacttt agactaattg tgtttgcctg 960
```

```
tccatgccat gaatgagtgg gctgtagttg ggcctaaata aatgagctgt tggaagaaaa 1020
gaatcacagt actttccagc agtcagtccc tggttcctag atgtgttcta agcaatgcaa 1080
atgtctaatt gtcccccagt gggcatagtc agtgtcgttt atattgtagc agttacagct 1140
ctgtagttta tgatgcaaatt ctgccaagag agatgtatgt gtcactgcat ggcttctgaa 1200
agcaggatga attttctgca gctgtttcaa agttgggggtc tgttcttgaa tcctctatta 1260
attactgtgt gtgagccaga gggagctgtg gtaagggttg ggcccccagc ctgtagggaa 1320
ctttctggac tccactcctt tgaatcgata taggcatttg gtctcactac ttgaccattc 1380
tcaccctgtg aaacgtccca cactttgaag caaatacaat tcacagcaca gtacacacaa 1440
aaaccttggtc ataagacaga gaaggttctt cttattttgt gggctggttg ctgtagaaac 1500
acataacaaa gggcagccct ccacttctgg tataattgtg tagccccctt tctttgggct 1560
tgacacctgt cttgaataag agtgattaga gctgcataat gtccctctct tggctattga 1620
ccatgtggtt cactgacaaa actctgtata agttgaagga aaatgttcat gttcatatgt 1680
acttgtttgc tatgactaca ttttgagggt ttgtaaaact gttatttttt tttttttcac 1740
aatgtgaaac tgaaggtcaa taaattatta gagattttct cttcaaaaaa aaaaaaaaaa 1800
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagggg gggg 1844
```

<210> 696

<211> 605

<212> DNA

<213> Homo sapiens

<400> 696

```
cctgcactac tctgtcaaat taaaaaatat aatagctatc tttattctca ttttaaagca 60
tgataatcat caaaatgttg aagtttatca cagttctaca ttaaaaaataa gtcatttttg 120
taggtgagtt atccaatata gcaaaggcca tcaaagagaa agccaatact ttcattggaga 180
gctcagagcc ttaatagatc ccagcagcaa tgcttcaacc attcccaact ccatgttcct 240
tgctagatgc tcctcacccc aaactcctgc aaatttcaag aatttctgtg tatgwtgtg 300
ttaaggagg agttttaaag tatctctgta ttcaacaaga tacgtcagct tgtaagcagc 360
agaaacctac ttaaaactakc ttacatgaga aaataacatt ataaagacat aggagtgttt 420
ctacaccaag agctggaggt attgtttggt ttcattgaagg gttaaaatct gtaattccaa 480
aagtaggact tcaggcagct gcaccatcaa tctgtgtctt tctctcwgg actgtgggac 540
tctatwcccg tctgacttgc tttggttccc ggggcatcat tcttggtttt gggaaaacac 600
acttt 605
```

<210> 697

<211> 540

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (113)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (114)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (488)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (489)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (534)

<223> n equals a,t,g, or c

<400> 697

```
agggcacact agggacctac cgtacaacac ttcagcattg ttaagcactt aaccatttga 60
aaaaacttaa tgaaatgatt aatttttttt ttaattttac tgaaggatgt atnnatagat 120
ttaggaggga tatgagggtg actaaaaagt taaatttttc taatgtgaac ttttatttat 180
gttggcttgt atcttacaat ttgtaathtt aaagtcattg taggccaatg raatgtgagc 240
gcctcaagaa tagctattaa gtatcatact aaatttggcg gacgtacaga tctgtgttac 300
aaagaaatgg aaaagtcata cctgtgtcac ggggatgaaa agcctgctag ccattccaat 360
tgactgagra catcttgcaa agaaccaccc ttacttctgc cggtagagcc ttgggcaaat 420
taaagtcatt tcaaatcaat ttagtagtaa gttcccttwt acmaatagtt atgtgtccac 480
acacgtgnng aatgttttat gggaaactaat ggaagcgagc aaatcccaga aggntctctg 540
```

<210> 698

<211> 496

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (271)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (477)

<223> n equals a,t,g, or c

<400> 698

```
ggcagagggg agactcagct gatactgctt ccttgagatt taatacacct tcctttgatc 60
tctcctgtcc ccattatccc aggaaaatcc agagtagctt ccagtccatt ctcathtaac 120
cactggatcc aaagtttaga gaggttcccc ttccctccag cctccttcct ggcccaacag 180
aggagcacc caccaccctc catcagctgc tcaaaaccca caagggaaaa atccctacag 240
gtccatgcc ggaggttagtg gagctaccct ncaggttcca ttaagtcata ccagaaggct 300
gagtgtagaa atgaacatta agagggttcc catctgtagg gaaagggttc aagatgcaaa 360
gctttacaga aggttctccg tctaattgtg aagattaaga gcactggtgg acctaggaag 420
atgaagaatg gagagtgggg aaaccagcag agattttcag gaatgtttta gggggcnttt 480
tcacgttttc aaagca 496
```

<210> 699

<211> 987

<212> DNA

<213> Homo sapiens

<400> 699

```
ggcacgagct caactgcaag gacgctgtaa gcaggaagag aagccacagc gcttcagaaa 60
agagtgggac agggacaagc atatctaaga ggctgaacat gaatccacag atcagaaacc 120
cgatgaaggc aatgtatcca ggcacattct acttccaatt taaaaaccta tgggaagcca 180
acgatcggaa cgaaacttgg ctgtgcttca ccgtggaagg tataaagcgc cgctcagttg 240
tctcctggaa gacgggcgtc ttccgaaacc aggtggattc tgagacccat tgtcatgcag 300
aaagtgctt cctctcttgg ttctgcgacg acatactgtc tcctaacaca aagtaccagg 360
tcacctggta cacatcttgg agcccttgcc cagactgtgc aggggagggtg gccgagttcc 420
tggccaggca cagcaacgtg aatctcacca tcttcaccgc ccgcctctac tacttccagt 480
atccatgtta ccaggagggtg ctccgcagcc tgagtcagga aggggtcgtg gtggagatca 540
tggactatga agattttaaa tattgttggg aaaactttgt gtacaatgat aatgagccat 600
tcaagccttg gaagggatta aaaaccaact ttcgacttct gaaaagaagg ctacgggaga 660
gtctccagtg aggggtctcc ctgggcctca tggctgtgtc cctctagcct cctgctcatg 720
ctgcacgggc ctcccctcca ccctggaccc gctctgtttc tgcctgggtc tcctgagccc 780
ctcctggcct caggggcatt ccacagtgtc ccctgcctc accgcttctt cctcgctctt 840
ccagactctt cctgcagagg ctctttctg cctccatggc tatccatcca cccccacaga 900
ccccgttctt ccagcctgcg tgccttaac ctggcttttc ccatctcccc agcataacca 960
aatcttacta aactcawset aggtggg 987
```

<210> 700

<211> 1675

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1616)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1635)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1659)

<223> n equals a,t,g, or c

<400> 700

```
tggattaaag cgggtaagtg ctacagctgc ccacagaaat gctttacaga atcctaaaca 60
gggaggcacc cagttgaaaa cagaaaaaat acatatgttt ttgttagctc cmgtggcaac 120
agggatcaac agtcacaatg atagaggaag gggcattcaa ggaaccatta atgagcaatg 180
tgctctctct ctcaaaatca gggcaagcca tggcaccaag atgatgactc cagagggtgt 240
ggcagaggca tatggcaaga aagagtggaa gcacttcttg tcggacactg gaatggcttg 300
ccgctcagga aagtattact ttacgacaa ctactttgac ctgccaggag ctcttctgtg 360
tgccagggtg gtggactatt taacaaaact gaacaatggg caaaaaacat ttgatttttg 420
```

```
gaaggatata gttgctgcta tacaacacaa ttataaaatg tcagctttta aggaaaactg 480
tggaatatat tttccagaaa taaaaagaga tccaggcaga tatttacata gttgtcctga 540
atctgtgaaa aaatggcttc gacagctaaa gaatgctggg aaaattcttc tgtaattac 600
cagttctcac agtgattact gtagacttct ctgcgaatat attcttggga atgattttac 660
agaccttttt gacattgtga ttacaaatgc attgaagcct ggtttcttct cccacttacc 720
aagtcagaga cctttccgga cactcgagaa tgatgaggag caggaggcac tgccatctct 780
ggataaacct ggctgggtact cccaagggaa cgctgtccac ctctatgaac ttctgaagaa 840
aatgactggc aaacctgaac ccaaggttgt ttattttggg gacagcatgc attcagatat 900
tttcccagct cgctactata gtaattggga gacagtcctc atcctggaag aactcagagg 960
ggatgaaggc acgaggagtc agaggcctga ggagtcagag cctctagaga agaaaggaaa 1020
atatgaggga ccaaaagcaa aacctttaaa tacttcatct aaaaaatggg gctctttttt 1080
tattgattca gttttgggac tggaaaatac agaagactcc ttggtttata catggtcttg 1140
taagagaatc agtacttaca gcactattgc aattccaagt attgaagcaa tcgcagaatt 1200
acctctggac taaaaattta caagattctc ttcaagcaat tcaaaaacag ctggctacta 1260
tccaaatcct ccactggtct tatcaagtga tgagacactg atatccaaat aagttgtctt 1320
tactgaaaaa tgaagtgaag acccatatat gcagttaaaa aaaagttaat tttcaaaaaa 1380
tactgtaaaa gactttaagg aacaagtttt attgaccaat aagttgatat ttgtccatag 1440
gtctcctttc tataaatcat cttgatgttt aacaactctt attatattaa aatctcagta 1500
tcctaaactc taggaacctt attggatatt ttctattaca gtagttttgt gggtgggatt 1560
caccgggggg ggccacacac tcacacggca cagttcactc tttacacata tggccncggg 1620
cccgtggggg tctcnaaggt gtggttccct tggggcctnt tgggcttggg ccttt 1675
```

<210> 701

<211> 556

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (454)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (502)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (505)

<223> n equals a,t,g, or c

<400> 701

```
ttaaccccac agtctacttt tttttctggt gcagacctta agacaatgta gtaatacgtc 60
ttttacccat ccccaaata acagtgtaca cagtgtgttt tttcccctta gtggagtggag 120
cagtatgtta gtgaggttag gtgagcatct agatttggtc cacagaaaag ggtgtttcca 180
gccagtatca gtgatgttggt tacttctcca acagtctaaa tctaagggtt ttaggagcct 240
gttygattaa gtgataagaa gataccctcg tctggtgttt ctttcagtgc tgcctcttca 300
tcttttagca gaaggcacia atgcctttta tttgctccgt ggtgaaaagc ttccagttct 360
caataggcac aggatgtcag tggccacagt tgggtgaagc ctgttcagag tcttctaatt 420
tgaaactgta gtggtgttta gtttataaag ctanaagaag aatctgtgga ggtctcggaa 480
```

ttgtatttgt gtggtgaaat tngtnacttt tagatgagga aagaaaacct ttgcttttgc 540
ccaaaacctg tgccag 556

<210> 702

<211> 1138

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1074)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1096)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1138)

<223> n equals a,t,g, or c

<400> 702

gccaaagcga gaatggggac ttagttcctg tcccctgagc ttcagagaac aaaaaaacct 60
gaggcctcca gtggctttct gtggctcccc agtgaggctg tcagcccctc agtcctcagc 120
cacttcctgg gctggggacc tcacagtttc ctgttcctgc cttgaggccg ggcaaacgca 180
gcaccaactg ctccccacag gtgcacagcg tgggtgctgtc agagcgggac ctgcagcggg 240
agatcaaggc ccagctggcc cagctgcccc attccgcgcc gggacccccg ccccgccac 300
aggtccgcct cgccggggcc caagccatct ttgaggccca gcagctggca ggagtgcgac 360
gaggcgccaa gcctgaggtg cctcggattg tgggtgcagcc cccggaggag cccagaccac 420
cgcgggcgaa accccagacc cgcggaaga ctttccatgg gtcctgact cgggcccggg 480
gcccccccat cgagggggccc cccaggcccc aacgaggctc cacctccttc ctggacaccc 540
gcttctgaga ggaccatgga cttagtgtcc cccagtctca attgcctgat ggctgatgcc 600
agcccggcaa ataggcaccg cactttactc ttgggactcg gggacttggc ttccttcctg 660
gcaaggacca ggcagtgggg aaggaggagg tcctccgtgg tacatactgg gtcaggcact 720
agcatggagg agggtcacag agtggggcac gtgaggacc atggaaccgt cctggtgccc 780
aggccctcac aagtaccaa gccagcacca aaggagtca ggaaggggtt ggctgagtca 840
agggacccca gagggcacca ggaataaaaat cttcttgaac agaaaaaaaa aaaaaaaagg 900
gcggccgctc tagaggatcc aagcttacgt acgcgtgcat gcgacgtcat agctcttcta 960
tagtgtcacc taaattcaat tcaactggcg tcgttttaca acgtcgtgac tgggaaaacc 1020
ctggcgttac ccaacttaat cgcccttgag cacatcccc tttcgccagc tggnttaata 1080
gcgaagaggc ccgcancggt tcgccctttc cccacaattg cgccctggaa tgggcgan 1138

<210> 703

<211> 1062

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1044)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1061)

<223> n equals a,t,g, or c

<400> 703

```
cactgtgtgg agggcacctc tctgtccctt ccgtgtctca ctgtctctgg aagcttcagc 60
ccatgtgtgt cctgggtgtc ccagcccccac cagagcccggt gccgggagct gacagctttc 120
acgcttaagg cacgtgtgac ctgggtagtc agacaccact tgagcccctg cccacatctg 180
ctggtttggt gcttcagtgg ggagctgaca gctgtgagca caccactgtc ccctcatcca 240
cctcggcctg catggggcac ccacttcctt ctgggtgggg cttccatggt aagggggcct 300
gcgtccctgc aactgcgag gactgccttg cacaggccca ctccctacga cacgtgactc 360
gttttagagc tctgtcccag aggcgttcgt atgtgaccca cagatggcgt caatgtgaac 420
acctctcttt gtgctgaatt tctgggccaat tcttttcctg tcttatttct aaatttcctt 480
cttccaagat gaaaaacaaa gaaaaactta aaacagaagg tattaaaaaa acaagagatt 540
cccaccatta tttaggttca cctgcaraac aaaaatctta ctccarcccc tcaatgccat 600
cctgacacac tttatgcaaa aagaattttc ccagataggc tagccagaaa aaacttcaag 660
tcctctgtaa catctgaggt gaccaagagg cagaagagca gagcagtcgg gggccgtgtc 720
ctggctgata ccaactgcag ctctgctgtg ggggcccgtg ggaggaggc agacccctgg 780
gctttcctgc tggccacgga gactctgctc ctgcatggaa agggagcctg ggagccagca 840
gcccacgcct ggggagcctg cctggggcca tgtgacctg gcctctccct gggaacgggc 900
tgaccacaac acaccctgct gccatccact tctgtttact ctgcaaatgt aagaaagaac 960
cacttgcca gaagtgtccc ccagatgstt tttttttttt tttttgggag acagttttgc 1020
yyttgyttcc cggytgaggt gcantggcat ggatctaact nt 1062
```

<210> 704

<211> 865

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (685)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (831)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (847)

<223> n equals a,t,g, or c

<400> 704

```
gagagaacta gtctcgagtt tgtttctctt atatgccac cattttttca tatatatatg 60
atttgatttt atatacacat atgtatacat attatatata aatatatatg tgtatacata 120
```

tatgtgtgta tatctatgaa tcaaacatac tgtttctggt ggagatgggt cagaattata 180
aagattatct gaatctttat ctgtgagcag tctccaagka agaagtgmr aggtgaagcc 240
tttgactgct gtcattgtct aggtcattcc aaggacatgg gagactgctg tccatgggtg 300
gacctcttta acatcagcag agttctgtca agttacttag ctttcaactgg ggcagctcta 360
gcattccatt aattcaaaat gktgtcctta atataagcct ctamcattta aaataaaaaat 420
tttaaagtta tccattaagg gaataattac atattgaatt cctaagaaat aagaattatt 480
tggttggttt tttctagata gaataaacac aagagctgga ctatattaac tgttgataac 540
acttttttaa ctggcatttt yagttacttg tgatttttcc aggaaaaata aaaatgaatt 600
aaagtgaac agtggacttc taattgggtt tgtcttttga ttacatttga ccatcaacaa 660
tgatgtaagc cttggataga atgtngcccc tcagtgtccc acttaaatct cttggtaaag 720
ctttggtgta tacacttcat tgtgcttttt ggaatgactc taaaagccca taaactaatg 780
ctttgcaaaag cctaaataaa aatgggttga gcctgtatta ggaaccactt nccttttatg 840
gtcctgnatg taaatagggg gtttt 865

<210> 705

<211> 1383

<212> DNA

<213> Homo sapiens

<400> 705

gctgtggagc ggctgcccgc gtttcggggc gcgcctcggc tgcctgcccg gcggtctccg 60
ggtcctcgtc cagaccggcc accggagctt gacctcctgc atcgaccctt ccatgggact 120
taatgaagag cagaaagaat ttcaaaaagt ggcttttgac tttgctgccc gagagatggc 180
tccaaatatg gcagagwggg accagaagca tgtgtgcctg gatgattgat agcttcggaa 240
atgaggaaca gaggcacaaa ttttggccac cgctctgtac catggagaag tttgcttcct 300
actgcctcac tgaaccagga agtgggagtg atgctgccts tcttctgacc tccgctaaga 360
aacagggaga tcattacatc ctcaatggct ccaaggcctt catcagtggg gctggtgagt 420
cagacatcta tgtggtcatg tgccgaacag gaggaccagg cccaagggc atctcatgca 480
tagttgttga gaaggggacc cctggcctca gctttggcaa gaaggagaaa aaggtggggg 540
ggaactccca gccaacacga gctgtgatct tcgaagactg tgctgtccct gtggccaaca 600
gaattgggag cgaggggagc ggcttcctca ttgccgtgag aggactgaac ggagggagga 660
tcaatattgc ttcctgctcc ctgggggctg cccacgcctc tgtcatcctc acccgagacc 720
acctcaatgt ccggaagcag tttggagagc ctctggccag taaccagtac ttgcaattca 780
cactggctga tatggcaaca aggtctgttg ccgcgcggct gatggtccgc aatgcagcag 840
tggtctctga ggaggagagg aaggatgcag tggccttggt ctccatggcc aagctctttg 900
ctacagatga atgctttgcc atctgcaacc aggccttgca gatgcacggg ggctacggct 960
acctgaagga ttacgctggt cagcagtagc tgcgggactc cagggtccac cagattctag 1020
aagagctggt ctggcagggg cctggaggtc agagccgcag ctctgctctt ttcggggggc 1080
ctcagattcc tctgctgctg cccttttctt ctggagatct gcgagaaggg tgaactgaga 1140
taatggatga gaaagcatgt tgaaaaccac agccggggct tttctctaag gttatcgagt 1200
acgtggttct cagggatcca agaacagtga tggacaaggc aaatgtgagc cagtatggtc 1260
atcagtagct ctatattgat tatcagccag atggcctaaa agatacctgt ctcaatatta 1320
ctagtgtatt tttcaataaa ataaaccatc actaaaaaaa aaaaaaaaaa aaaaaaaaaa 1380
aaa 1383

<210> 706

<211> 1155

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (36)
<223> n equals a,t,g, or c

<400> 706
ggcagagtga ttattttaat gtaaccttgc taaagnagtg atttctatct cttttcttaa 60
agaggaggaa caagaagatg aggaagaaat cgatgttggt tctgtggaaa agaggcaggc 120
tcctggcaaa aggtcagagt ctggatcacc ttctgctgga ggccacagca aacctcctca 180
cagcccactg gtcctcaaga ggtgccacgt ctccacacat cagcacaact acgcagcgcc 240
tcctccact cggaaggact atcctgctgc caagagggtc aagttggaca gtgtcagagt 300
cctgagacag atcagcaaca accgaaaatg caccagcccc aggtcctcgg acaccgagga 360
gaatgtcaag aggcgaacac acaacgtctt ggagcgccag aggaggaacg agctaaaacg 420
gagctttttt gccctgcgtg accagatccc ggagttggaa aacaatgaaa aggcccccaa 480
ggtagttatc cttaaaaaag ccacagcata catcctgtcc gtccaagcag aggagcaaaa 540
gctcatttct gaagaggact tggtgcggaa acgacgagaa cagttgaaac acaaacttga 600
acagctacgg aactcctgtg cgtaaggaaa agtaaggaaa acgattcctt ctaacagaaa 660
tgtcctgagc aatcacctat gaacttggtt caaatgcatg atcaaatgca acctcacaac 720
cttggtgag tcttgagact gaaagattta gccataatgt aaactgcctc aaattggact 780
ttgggcataa aagaactttt ttatgcttac catctttttt ttttctttaa cagatttgta 840
tttaagaatt gtttttaaaa aattttaaga ttacacaaat gtttctctgt aaatattgcc 900
attaaatgta aataacttta ataaaacgtt tatagcagtt acacagaatt tcaatcctag 960
tatatagtac ctagtattat aggtactata aaccctaatt ttttttattt aagtacattt 1020
tgctttttaa agttgatatt tttctattgt ttttagaaaa aataaaataa ctggcaaata 1080
tatcattgag cmaaatctta aaaaaaaaaa aaaaaagggtc gagccggccg gctaattagt 1140
agtagtaggc gccgc 1155

<210> 707
<211> 1417
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1378)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1392)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1399)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1404)
<223> n equals a,t,g, or c

<400> 707

```
tgagaccctg tctcaataat aataataata ataataatag taataatgaa gtaaattggga 60
taaggaaaga argataatta tcttttaaagg ttgattccca cctccctcc ccagttactt 120
aaggaaactaa gtgagtacat ctccagttgc ccatgaaagc ataagtttgt tttcctcagc 180
tgaggcaagt ggtagagtat acaggataac gaagtaacat gtaaaaggca ggacgcacat 240
aaagggtgtac atggctattg tttcacctgg agaaaccaca tgattgggac ctgaaggttt 300
actgactgac tacaggggct gattgtgaag cacgaggaac cccatgtgtg tggagactgt 360
aggggtgagag cacacaatta ttagcatcat ttctgagtga tctcacagat tttttttctt 420
gtgtttgttt tgctttttga caactgcttc tcccacgttc cttgcaattc tattctctca 480
ccttcacttt actattttgta ttcgatggac caggataatt caggcaaggc taccttgtaa 540
acttgaattg gccacacacc atgttgtcac ccagctggct atgaagtga taatggtact 600
gaaagtaaac ctgaagacct ttctcagatc tattttaagt ctgagtctga ccaaccatgg 660
aaaatattcg acatgaatta atgtagagaa ctataaagca tttatgacag ctccaagaaa 720
aatcatctac tctatgcagg agatatgttt agagacctct cagaaaaact tgcctgggtt 780
gagggtacac agtaccattt taatcttctg aaaatatctg tattcctgct ctttttctgc 840
tgtcactgtc aatctgctat atttttcact atcctattaa aatattactg tctcctttat 900
ctgttcaatg tccatatttt aaaaaaatct tccttgatg agctattctg atccaaataa 960
tttctctgat atttctctat atggctccca caacaatttc attgtgttta gcatacttat 1020
ttctccatac attgtaaaac tgtaatcctt aggtatttct aaacataaa gaggagaatt 1080
aagtcagctg cagaacaatg gggctgawtc ytctgctttt tctctggaaa atctttcatt 1140
gcttttggtg gaaatttacc tagaggttac aaccacagga tgtagcttgg tctcttattt 1200
gcctttttgg gaaaccaatt aagattaata caggataaag gaaaaaagca atctattcat 1260
tatataacac agttgtttgt attacttggt ccctgcaaag gcaaatctgt tgaatgcttg 1320
cattttggaa ttcttttcta ataggaacaa ccaaaaaagg gcttcttatg ggtgcagncc 1380
ggaaaaaagg tncattttnt tggnttgcac tcttaac 1417
```

<210> 708

<211> 948

<212> DNA

<213> Homo sapiens

<400> 708

```
ggtagacagt gtgtctcact aggggtgggtt atcagaaaaa ggctctacaa agtgacattt 60
aaagactgag aggaaaggag agagtgtgat cctaccaatg attgcctccc ctctcccaca 120
tattaatgta ttacttaaaag gaactgattt tttaaaattg gattgaatca tggaaacatt 180
ctttgagaat atggaaataa tttaatattt ttcccgttcc cagctcttca gctgtaacag 240
tgactcaaaa tcaattacat taagattagt ttttttgtyt tggttttttt ttttaagwact 300
ttgtgcttta aatataagkg aaaatactgk atttactttt gtgtgcttcc atctgaacta 360
aagtttccca tggggtctac cgagttaggc ctggctctgg gagaggagtg gacagcagct 420
ggttgagata catccccatc tggagacagg actgccactg acagaagatg tgagctgtgt 480
ctaagtcagc tcttggtgcc agccgtgtct gcgccttcac tctttggaac tctgcataca 540
acatcttagc accatcttcc tgcagctctt ccttacctaa ataaagaaac agcccaaggg 600
cagtatttct aaaagcactg taacagcttt tcattttctc cacatatact acaaaattcta 660
taaagaaaga aattaattta aaaaaactaa gatgtttttc tcttctggct tcataaatgc 720
cttgctgtat aaattgaaat attgatactg aactgtcttt ttaatgatga cctaacttta 780
ttcaaccatc cggaatttac tttttccctg aaataagatc ttttccactg gtctactacc 840
tgaccataaa catgtctgca tttgaattct ctaaacctta aatctgtgtc tatgaaaaat 900
acaaatgact attaaatatt attctcttta ctgttctctt tcaccgaa 948
```

<210> 709

<211> 1329

<212> DNA

<213> Homo sapiens

<400> 709

```
ggcacgaggg gagtgctgtc gtgggggatt gtgggaaaag atggcggtct cgcacaaac 60
ccgggttggt cgggtcctgt caatgtcacg ttctgccatt actgcaatag ccacatctgt 120
gtgtcacggc ccaccctgtc gccagcttca tcatgccctc atgcctcatg ggaaagggtg 180
acgttcctca gtcagtggga ttgtggccac tgtgtttgga gcaacaggat tcctggggcg 240
atatgttggt aaccaccttg gacgcatggg gtcacaggta atcataccct atcggtgtga 300
taaatatgac atcatgcacc ttcgtcccat gggtagcctg ggccagcttc tgtttctgga 360
atgggacgag agagataaag attctatccg acgagtagta caacacagca atgtggtcat 420
caatcttatt ggacgagact gggaaaccaa aaactttgat tttgaggatg tttttgtgaa 480
gattcccca gcaattgctc aactgtccaa ggaagctgga gttgaaaaat tcattcatgt 540
ttcacatctg aatgcgaata ttaaaagctc ttctagatat ttgagaaata aggtgtgttg 600
agagaaagta gtgagagatg catttccgga agccattatc gtaaagccgt cggacatctt 660
tggaagagag gatagattcc ttaattcttt tgcaagtatg catcggtttg gtcctatacc 720
ccttggttcc ttgggctgga agacagttaa acaaccagta tatgtcgtag atgtatccaa 780
aggaattgtt aatgcagtta aggatcctga tgccaatggg aaatcctttg ctttcgttg 840
tcccagtcgg tacctccttt tccacctggt gaagtacatc tttgctgtgg ctacagatt 900
gttcctccca ttcctcttgc cgctttttgc ctatcgatgg gtagcaagag tctttgaaat 960
aagcccattt gagccctgga taacaaggga taaagtggag cggatgcaca tcacagacat 1020
gaaattgcct cacctgcctg gcttagaaga ccttggtatt caggcaaac cactggaact 1080
caaggccatt gaggtgctgc ggcgtcatcg cacttaccgc tggctgtctg ctgaaattga 1140
ggatgtgaag ccggccaaga ccgtcaacat ttagtgcttc ctgagcagct cttggttttg 1200
gcgtcttttg ggtcgcccca tgtggtttga gcaccagcc aggcggtctc tttagaggat 1260
cctgtacaca gttccactat taaaacattt caggttgaaa aaaaaaaaaa aaaraaaaaa 1320
raaaaaaaaaa 1329
```

<210> 710

<211> 534

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (529)

<223> n equals a,t,g, or c

<400> 710

```
attctgactt tggttttgat tctggttttg tataaactgt aaaagtgtgt gtgtgccctt 60
tttacctgtt ctttgttttg tgggtgtgtg atggtgtgag tgtggtgttt tgtcttgagg 120
aagcatgggt caggcacaaa gtaagccac cccaccagga actatgttga aaaatttcaa 180
gaaaggattt ragggagatt acggtgttac tatgacacca ggaaaactta ggactttgtg 240
tgaaatagac tgccagcat tagagggtgg ttggccatca gaaggaagcm trgacaggtc 300
ccttgtttca aaggtatggc acaaggtaac ctgtaagcca gggtagccag accagttccy 360
gtacatagac acttggttac agctggtttt agrcccttcc taccctcacg gtggttgaga 420
gaacagcagc ataagcagct ggcagaggca aggaaagacc agcaaagaga cagagaagaa 480
agagacagga aaagaggcaa agagagagaa gaagagagag aggaagagnc agag 534
```

<210> 711

<211> 1143

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (41)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (77)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1110)

<223> n equals a,t,g, or c

<400> 711

```
aaatgctcca gggnatcgct ccaacaactt aaaggaggct naacacctgt tgcacgcctg 60
ctcatggcag cgcttgnaga aatgactggg ggagtccagc gaggtcgggg acgcagcggg 120
ctccaggctc cagaaacctc cttagccttt tgtggtaact ttggtccggc ggcggggggc 180
cgttgagcag gaactggagg gaggcggtgg ggaaaccgtg gatccgtccg gctgagggtg 240
cgtggatcag actgggctga gcaggcaagt catcgctcgg tcacagcgag gcgaccagg 300
agcgaacttc cagggcagcc tcccttttgt tggcgctggg agagaatgtg ggcattgggg 360
tggggaggcg cgaagctccg aggccgggcc gcggatactt taaagctcag agctgggagg 420
gcccaaagga agggcgggcg tscmcatggt tacccttctg tgcgcgggtc aagtagcttc 480
ttctggaggg cgcaaggcgc ggcgggggtg atgagccctt gggttctcgc tccgactgct 540
aaattcgctt ggcggggtcc accttctcgt ggcctcactc gccacacgga tcagaatccg 600
gagcaggcag ttctctctat tctgaggctc ctgcggctgc cgcgctgact tccctgtgtg 660
cgggagggaa ctctgggcag gctgggtttt ttggaatgtg tttacgatgt tgaatgggac 720
ttgaacagga agctggacgc tgcagctgga actagcgtgc caagttatth atgattccat 780
ctgatataca taggagagaa actgatagaa gaattctgat ggcaactgta tgatagaagc 840
tatataaagt caagtgtcca ttttctttca actatatttg agcataacca ggrtttaagt 900
cgtggaactg aacatttatt tggctgatcc tcatcatgaa ccgtgctttt agcaggaaga 960
aagacaaaac atgggtgcwt acacctgaag ctttatcaaa acatttcwtt ccctataatg 1020
caaagtthct tggcagtaca gaagtgaac agccaaaagg aacagaagtt gtgagagatg 1080
ctgtaaggaa actaaagttt gcaagacatn tcaagaaatc tgaaggccaa aaaaaaaaaa 1140
aag 1143
```

<210> 712

<211> 3779

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3758)

<223> n equals a,t,g, or c

<400> 712

```
tcttattcgt gtatttcttt tgacacttta cccctctatg aagcctcaga ggtgttttaa 60
aattgtgtta ggaaacacac agagataaga aaaggcaa at ggcctgac tagtgtctca 120
gggaagagtc tggaaggaa acgcggcgra gtgggktggg agagggggcy tgtggttttg 180
cttctgtccg ggctraagac tgagtaaggt agggccctc cttctgcgga tgggtttctc 240
tctcattcca cctccaccc actccggttc cgcgtgcacg cgragatagt ccartgggccc 300
cacagataac gaccatcaga gattaaagaa ggaaagtcag cgagcttgaa cacaggcgctc 360
ccgtgttgaa agtccaagg agaccgccag aagtgcgcaa gccggagtcg gctagagttt 420
ccttctcacc gagaggggga gccggcggtt cccggccggg agcgaccggg agtccccagc 480
cccgctccc agctgccgcc agcgcagtt ttggattcgg cggattagga agaggaggga 540
ggggggagag agcgcgaaga gggaggggac cgaagctgga gggccccgag tccagcgccg 600
tggtggcgta ragaaacttt ccctctcggc ctcgagacg gcgccccggm cgtgcyggag 660
tggmratcgc caggctcgga ggaaccggca gctctccacg cccctgcccg aagcctgacc 720
cgactgcctc tctcagttag ttatttatga ttccatctga tatacatagg agagaaactg 780
atagaagaat tctgatggca actgtatgat agaagctata taaagtcaag tgtccatttt 840
ctttcaacta tatttgagca taccaggat ttaagtcgtg gaactgaaca tttatttggc 900
tgatcctcat catgaaccgt gcttttagca ggaagaaaga caaacatgg atgcatacac 960
ctgaagcttt atcaaacat ttcatccct ataatgcaa gtttcttggc agtacagaag 1020
tggaacagcc aaaaggaaca gaagtgtgta gagatgctgt aaggaaacta aagtttgcaa 1080
gacatatcaa gaaatctgaa ggccagaaaa ttcctaaagt ggagttgcaa atatcaattt 1140
atggagtaaa aattctagaa cccaaaacaa aggaagttca acacaattgc cagcttcata 1200
gaatatcttt ttgtgcagat gataaaactg acaagaggat attcactttc atatgcaaag 1260
attctgagtc aaataaacat ttgtgctatg tatttgacag cgaaaagtgt gctgaagaga 1320
tcactttaac aattggccaa gcatttgacc tggcatcacg gaaatttcta gaatcaggag 1380
gaaaagatgt tgaacaaga aaacagatcg cagggttaca aaaaagaatc caagacttag 1440
aaacagaaaa tatggaactt aaaaataaag tacaagattt ggaaaaccaa ctgagaataa 1500
ctcaagtatc agcacctcca gcaggcagta tgacacctaa gtcgccctcc actgacatct 1560
ttgatatgat tccattttct ccaatatcac accagctctc gatgcctact cgcaatggca 1620
cacagccacc tccagtacct agtagatcta ctgagattaa acgggacctg tttggagcag 1680
aaccttttga cccatttaac tgtggagcag cagatttccc tccagatatt caatcaaaat 1740
tagatgagat gsaggagggg ttcaaaatgg gactaactct tgaaggcaca gtattttgtc 1800
tcgacccggt agacagtagg tgctgacatc aagaacaaga aatcctgatt catgttaa at 1860
gtgtttgtat acacatgtca tttattatta ttactttaag ataggtatta ttcatgtgtc 1920
aatgtttttg aatattttta ttttttga aa attttctcag ttaaatttcc tcaccttcac 1980
tattgatctg taatttttat tttaaaaaca gcttactgta aagtagatca tacttttatg 2040
ttcctttctg tttctactgt agatgaattt gtaattgaaa gacatattat acaaatacct 2100
gccttggtgc tgagtcttat ttagttagca tcttgaaatt tgtattcatt ttccagatgg 2160
ctagtttatt aatgatttcc caaaagccat accttaaaga taacttttta aattctgaag 2220
agacatgcca atgtcaaact aaacatgttc tgttttttaa ccaacaaaca tgttactatt 2280
cattggacag atatcatttt atgtataaat actgttcaca tcaactgggaa aatgtaaact 2340
ttaaacataa tgccacaagg tcactaattt ctagcaggta aaattataag gatataaatt 2400
ccaataataa accaaatgta tttagagtat ttattagtaa atgcaagggt atgttagtta 2460
tgatcagtta tactctaaat atttaatttg ttttataaag gtagtgaaaa aatgaaaaat 2520
tgctatttat taaaaaacat taaatttcat tccaaatgag ataagtata ttactataac 2580
atctaagcat catctgattt gatattccct aaaaaacatt tggaatatat gctatctata 2640
gattcagtat ctactacca tatttacttt accaaatata tttctcctca ctgcataagg 2700
actactcttc tcatattttc ttctttgatg aagatatttt tcaccaaagt ttattttgtg 2760
```

```
atgccctctt ggttttgata ctttaaaatc tgtggcaccg gttctacatg aattatcaat 2820
atttggtaaa ttcaatctgt atttgttttg ttaaagtcaa aaatctcatt ttccaaaaaa 2880
aaaaaaaaa cccagttact gctcagttta gtcttgaaca tgagcaataa aattctcttg 2940
catttcatta ttgatgtgct gatgaacctg gactttttaa aatatttggt tcctatacct 3000
ttacccttta cctaacagac taatttgtac tcagtaaaac aaaaatttat ggtcaaaatt 3060
tctaacttgg ttcatcacat tataagataa ataaattaaa ttaatgaaaa tgtgacttag 3120
agtaggggta gccctcaaaa atagatttat catttactca ttggaatttt cttcaagtgt 3180
taaagggtaca ttttcactag gaaaagaaat caaatatgct tatgcaatat atatttgtgt 3240
gtttttcctt aatgtttatat ggtatatatg agccttcttg tttagtttct tttatctgct 3300
aagttgtacc ttaattagag ggcaatatat gtttcataaa gaagagtctt tataattttg 3360
tttgtcagat agtatttttg aatttgtata ataaggatgt ttagaagcca tataagtggc 3420
tttttttaac agatagaatt tgtattttta ttgtacttta aaaagattta tgtaataggt 3480
atatatttag tggccattta ttatcaatgg taacacaatg gagtactaag atgggtatttg 3540
cacatttaag atatgttact ttaccaattt ttaatggtaa tcaactctgc tactggcatg 3600
atgaaatagt acataactgg tcattaatta tgaacattta yttctccagt gcgtttttat 3660
gaagatctgg ttgaaaattg tatttctatg taaactcaac gatatgtttg gttttcctga 3720
aaataaatga ttttaataaa aaaaaaaaaa aaaaaaanaa aaaaaaaaaa aaaaaaaaaa 3779
```

<210> 713

<211> 1036

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (54)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1017)

<223> n equals a,t,g, or c

<400> 713

```
ncgccctgtg ctggaattcg gcttngagcg gccgcccggg caggtacctc ggtntcaggt 60
tcattccatct ccagtggaaat gttttcaata aaagatgaag aaaatgtgtg tgatctttaa 120
taacacatcc ctatagaaaag tggataaaaag atataccaaa actgtaatac agatatatac 180
aaatataggt gcctttttga ttactcttgt ttgtctagta tggctcttga aagaaaacca 240
agcaagcaag ttgctgccta ttctatagta atattttatt acacatgatt gatatttttg 300
tggtagggaa gtgggatgct cctcagatat taaagggtgt agctgattgt attttatctc 360
taaagattta gaactttaga aaatgccgac ttcttccatc tatttctgaa aggttctttg 420
```

tggatttata tagagttgag ctatataaac attaacttta gatttgggat ttaaaatgcc 480
tattgtaaga tagaataatt gtgaggctgg attcactaca caagatgaac ttcacttcat 540
aaattaatta taccttagcg atttgcttct gataatctaa aagtggctag attgtgggtg 600
ttttggttaa ggtgatatgg aggtgggaga gcttttagtt aagtaagaag ctatgtaaac 660
tgacaaggat gctaaaataa aagtctctga agtattccat gccttttgga ccctttcctc 720
gcaactaact gtcaactggt gatcaaaaaa gtcaaggcat tgtatgttgc ttctgtggtt 780
attattctgt gatgcttaga ctacttgaac ccataaactt ggaagaatct ttgagcaaat 840
tttctcagtt gtctgtatga cttcagtata ttcttgggaa tgccatagga ttttttgtgc 900
ttgatacatg gtatccagtt tgcatagtat cacttctttg taatccagtt gctgttaaga 960
atgatgtacc tcggcgcgca ccacgctaag ccgaattcca gcacggctgg cggccgntaa 1020
tagggatcca gggtcg 1036

<210> 714

<211> 4443

<212> DNA

<213> Homo sapiens

<400> 714

cccacgcgtc cgccacgcg tccggattac ttgttccctg caaaggaaat ctgttgaatg 60
cttgcatttt gaattctttt ctaatagaac aacccaaaaa ggcttcttat ggtgcagcag 120
gaaaaaagat cttttttata gctttgcatt cttaacatag catttaaaga gcggcatgaa 180
ttagaggaaa gacatggaac acacaggtag tcggtttgag atcatcggtt taaaagtatc 240
ctaggatggt aatgaccacg aagtatttcc agttgtctag tgggtgtggt tgcaggaaatg 300
agagtgtttt cttccattcc tgttggarar gtggcaatct tagcagagcc actatttgga 360
gttgataact aaagatgcaa ataacrtgac tatgccttct ggtcatccta sgactatttg 420
gagttctcca aaacctgtga agaggcatgt caggcatgca gtaaaagcat ctacaacttc 480
agctgggcac tggcagcata ggtctcatct tggaccatac agtcccactt tatagaagag 540
rgtggaagtt ctccaaaaca atatccacaa caaagtctga cctcactctg agggagatgg 600
gaagtgggag gaagaaggac taaccagctc cctggagtaa gaggaatttg ctttccctgt 660
ctgcccacca ggggctatat gtgccacctt tcagggtggg gccaaaggaag tgatgtcagt 720
gtgacagaag ggagagttag acctccagac gtcagcctcc ctcccagggg gtacattttc 780
aatctgagtg ttgtgcctt agctgtgttg gtattagctt gattgggttg tccgctgggt 840
atgaggtgta gggaggcagt ttttgtttag ttttaggac tttgcctctt cctttgtcct 900
tagcataatt tctaggcaga gcattccacga agtcgggtttt cattgccagc tcaagagcga 960
caatcattta cgagtcccta tgttatgtta ggtgccttat gtatattatc ccaaatccac 1020
tgcattggtt aaatacaggc actggaatat aaatgaaaaa ggtcattaca gtcactgact 1080
ttctgcagga ccttaaacat ttctctttcc acaagtttcc ccttaatcat gtgtcaaacc 1140
tctcttcctg acgggaatgt tgtgctataa tgaatctgca taacgcttgg gattctagga 1200
ggaaggaaag ttccatggac atgtaagtac agcatattcc cctcagtcct ctaggagggc 1260
agagtgaatc ccagaactgg taagattggg aatctgagca ttgccacttt aatcttagaa 1320
tatttatcat tttagacat cctgtttttt agagaggaaa acaaacacag tttctgcatt 1380
ggtagtgtaa agcatacctt gtttagaacg tgttttgtaa gacacatttg ggtgtcatt 1440
ctagagcatg tcaaaacttg tacttcaaaa tatatttagt atgattgtta gtggtaacat 1500
atatcaaggc tttgaattaa ctgttttatt taattttcac aagaagcact tatttttagc 1560
ataggaanaa caatctgagc tacaaatagt tctttaaaaa aagcccagggt tatttagcta 1620
ttctagaaag tgccgacttc tttcaagaag caggcattgt aggacagctg agaattatca 1680
catagcctaa attctagcct ggcagcaaga gtcacatctg agatgtccaa aaaaaaaaaa 1740
aaaaacacct grtctacatt gaaagggggt agactaacgt atgtgagacc attttcctat 1800
ttgcagttac aaggttaaag aacttkgaag gcattcggct gctaagaggc atgtcgaaca 1860
ctctgkgtgg ctctttcaca gtaaacctty ctaagagcag aagacacatg gctgttagtg 1920
tctgctgtta gatttaattt ctcaataaaa ggcccttggc tgcgtatcat ttcattcagt 1980

tataaactag ggctcctgca agcaccceca ttctaagggt gaattattga aatcagttgc 2040
tatttgatga gtcacaactg gccagcagc cagggcattt gaagtcacgg tcatcaaaaa 2100
gaaatgattg ttttttgaaa agctaaatgc ttaaaatgct tctagaggga agtcgtgggg 2160
cgtgtgctca ttctctttaa aatcaggggt gttgagtttg tttttaaaca tttttataag 2220
ttcatgagaa aaaatatata aattctaaga accaactg tattcccaga aacatgaccc 2280
tcgctggctc tgggtccaca tatcattgga ctctggggga caaaaagatg cctgtgacac 2340
tttgggtgtg ccgagttagt caacaattat tctgggaaaa agcagaattg aattcttctc 2400
tagatgtcct accaggggtg gccaaaggcc acaaagcagg ctaataaatt cccacaggat 2460
ccagacacca ggcaaaattg ctctaagaag ccagttactg tcatccctct atggttctag 2520
aaaaaatagt acaaaaatga caggctatcc tatgagcgct atgccaatga aaccccatct 2580
tctggagaag cccttgaatc agaattatct tttttcttga tgcgtcaga tgcagccagt 2640
ttcttaattt ttttaaaac tgtatgttc tgtggtatgt atattgtac acctaactac 2700
ctggcacttg gaaatcacag cactactcag aggcaattga ataaagagaa atttaatttt 2760
aaatatcaag tcctgtcaaa catcttctcaa acttctgatt ttatcaaagg tttgccagcc 2820
aataaagtgc atcccaagta tacaggggag aaagctagac tcctacaggg tcttagagtt 2880
taagtaattt tttgttatt aatataggta ataatttttc taatttttat tttttggttc 2940
caaagtataa gctccttggt tttacctctg tttatgtcat tcttgacatg tttatctaaa 3000
ttatgtgtgc tctgtgacag gtgaaatgta aatctgggat ccatagtcaa gatatacata 3060
ggacctactt cccagcctac ctttcttctc ctacctgata atgataatac tcaaaataac 3120
aacattcaaa ggaaacacaa agaaatcctg ctttcacatc tcctatttct tgggctcctt 3180
aataactact gatggtttgt tcatgaaaaa aaatttttaa atcaaaagat tgtacttggc 3240
cctgagttga aaaaatttca aaaatcaaaa gtttgtactt ggccctgagt tgaaaaaaa 3300
aattcacatt ctaagaataa acagaaaaat gttcttcttg gaagtaaata acaaaagcca 3360
tagtgtttct atttgcctt tcttcaggat acacggtaga agtcagagaa tctttgatac 3420
ttttatttgg tgcaataatc aaggccatgc aacaacccaa aatcaagcat tttggttcaa 3480
gtcaggatga catgagtggg gacagaagct gtggcagtc tcaaaataat ctcaggggtc 3540
ctgaggaaaa gacaggagtt aaygtattaa gtttctacta tatgcaggaa ctgtgttaaa 3600
tattttacat aagttttgat aatagctaac attagctgag cacmaaattt gggccctgat 3660
ttgtgtctgr tatctttcac agattactgc ttttaatcag cagtccttgt gagctaggta 3720
tgatcattat ccccatttta tagattacag atgagattct gargcacaaa gaggctaagt 3780
aacttgccaa agatcatacg atgttaagtw atggcccctg gattcagctc gcagcctgaa 3840
ttcttaacca attatactgt gatttcatta ttcttcagaa ttactactaa aagaagggtat 3900
tattcccatt ttacagatga ggtatctaag ctacagagaag ctaaacact tgtgcaacaa 3960
tcactaagct tataagcagt ggattaggggt tagattttaga tatttgtctg gcatccaaac 4020
ctgtgtctct cctacagtac cacatgggtt ccacagctct atcagacccc ggaatttcac 4080
tccctgagac tgcttaattg tgaatttccc aaactgattc accaagagcc tactgtctct 4140
gctttgtaga tagctttgac cacattcaat gacattagga aagactccat ttcccaagat 4200
ggctcagaaa atcagatgct atgacgcatg ttgaaagtga aaacccatct ctgagaaaaga 4260
agcatctgtt ttattagtaa aaaaaaaaa atgaaattta cagcaatgtt gtgtgacttc 4320
tcaaaattct ttcattttct tatttcagaa tgaatagtgt tgttcgttg ctgggaatgg 4380
ggaagaatgt gattttttaa aataaagcat aatcaaactc tgcayaaaaa aaaaaaaaa 4440
aac 4443

<210> 715

<211> 2099

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2096)

<223> n equals a,t,g, or c

<400> 715

```
caggcaaggc agtggccgct ttgactgctt gcttcggaga tmcgagacga cggagaaggc 60
actcttattt accgaccaag aaagctcctc ccccgctcctc cgttagctaa ttaaaacatt 120
tttcagggaac gtagccatcc agagacattc cattattgtt ccattgacct ttccctcatc 180
actgagtcct ttggagctga gttatgtcaa cagctgcctt aattactttg gtcagaagtg 240
gtgggaacca ggtgagaagg agagtgtgc taagctccc cctgctgcag gacgacaggc 300
gggtgacacc cacgtgccac agctccactt cagagcctag gtgttctcgg ttgacccag 360
atggtagtgg gagtccagct acctgggaca attttgggat ctgggataac cgcattgatg 420
agccaattct gctgccaccc agcattaagt atggcaagcc aattcccaaa atcagcttgg 480
aaaatgtggg gtgcgcctca cagattggca aacggaaaga gaatgaagat cggtttgact 540
tcgctcagct gacagatgag gtcctgtact ttgcagtgtg tgatggacac ggtggacctg 600
cagcagctga tttctgtcat acccacatgg rgaaatgtat tatggatttg cttcctaagg 660
agaagaacct ggaaactctg ttgaccttgg cttttctaga aatagataaa gccttttctga 720
gtcatgcccg cactgtctgt gatgcaactc ttctgacctc tgggactact gcaacagtag 780
ccctattgctg agatggtatt gaactgggtg tagccagtgt tggggacagc cgggctatct 840
tgtgtagaaa aggaaaaccc atgaagctga ccattgacca tactccagaa agaaaagatg 900
aaaaagaaag gatcaagaaa tgtggtggtt ttgtagcttg gaatagtttg gggcagcctc 960
acgtaaatgg caggcttgca atgacaagaa gtattggaga tttggacctt aagaccagtg 1020
gtgtcatagc agaacctgaa actaagagga ttaagttaca tcatgctgak gacagcttcc 1080
tggctctcac cacagatgga attaacttca tgggtgaatag tcaagagatt tgtgactttg 1140
tcaatcagtg ccattgatccc aacgargcag cccmtgcggt gamtgaacag gcaatacagt 1200
acgggtactga ggataaacagt actgcagtag tagtgctttt tggtgcttg ggaaaatata 1260
agaactctga aatcaacttc tcattcagca gaagctttgc ctccagtga cgatgggcct 1320
gattaccagc tgggacttag agtttctgtg cacatttttt cactgagcat gtcaagaaac 1380
tgataagatc aaaaaggctc cctaactcac tagatcagcg cacaagtcag tgtaaaccac 1440
ttagatagta gttttttcat aaatgctcat cataattatg ttccgctgta catgttcagt 1500
ataaatatat gtgtagtgaa gctactgtga gtcctttaat ggaaagagca aatgagaagt 1560
ggtttgata cacttgatga gagatgagag tgtcacatta ataattttta agactcttag 1620
gcagctatgg gtttcttttg atcatttttg ttctttattc atttgaacac gtttttgaag 1680
ttcttcaaaa ctagtcatgt tgaattttga cagctattca atatgtgatc tccaagttaa 1740
aaaaaatttt tttccagact tccctaattc taaaatgcga gtttttattt ttaataactg 1800
taccaaggaa taagtatgaa aacagttctc tgttaccata ttttgtattc tggaccactt 1860
actggtgaaa gcaacatgc aaaagaaatt aatttggsca ggcatgagcc accgcacctg 1920
gccagatctt tgtatgtctt aagtgtttca aagtataaag catttttctg gggggatgtc 1980
cattttggag ggatccattt tgatcctttg tactctataa tgtgaacttt cccctgttcc 2040
aacacttaaa agaaaattat tagcacataa tctaaaagat ggaatttttt ttttttctt 2099
```

<210> 716

<211> 574

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (507)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (537)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (547)

<223> n equals a,t,g, or c

<400> 716

```
ttcgacccac gcgtccgccc gggcgcacgg ccagccgtct cgcgagtgcc ggactggccc 60
gatctgctgt cagtcagcgg gaacagactt ctccctctcc atctgggtcaa ctgcggggaga 120
aaaatttttcg agaattttcca gcaggcaagg cagtggccgc tttgactgct tgcttcggag 180
atccgagacg acggagaagg cactcttatt taccgaccaa gaaagctcct ccccgctcct 240
ccgttagcta attaaaacat ttttcaggga cgtagccatc cagagggatt tgcttcctaa 300
ggagaagaac ttggaaactc tgttgacctt ggcttttcta gaaatagata aagccttttc 360
gagtcagtgc cgcctgtctg cttgatgcaa ctctttctga cctctgggac taytgcaaca 420
gtagccctat tgcgagatgg tattgaactg gttgtagcca gtgttggggg acagccgggg 480
ctattttgtg takaaaagga aaaccntga agttgacctt tggaccataa ttccagnaag 540
gaaaagntgg aaaaaggaaa ggtccaagga atgt 574
```

<210> 717

<211> 847

<212> DNA

<213> Homo sapiens

<400> 717

```
gcgtcgcgcg ctcttctctg gagctaccca ggcggctggt gtgcagcaag ctccgcgccg 60
accccgagac cctgacgcct gacgcctgtm cccggcccg catgagccgc tacctgctgc 120
cgctgtcggc gctgggcacg gtagcaggcg ccgccgtgct gctcaaggac tatgtcaccg 180
gtggggcttg ccccgcaag gccaccatcc ctgggaagac ggtcatcgtg acgggcgcca 240
acacaggcat cggaagcag accgccttgg aactggccag gagaggaggc aacatcatcc 300
tggcctgccg agacatggag aagtgtgagg cggcagcaaa ggacatccgc ggggagacct 360
tcaatcacca tgtcaacgcc cggcacctgg acttggttc cctcaagtct atccgagagt 420
ttgcagcaaa gatcattgaa gaggaggagc gagtgacat tctaataaac aacgcgggtg 480
tgatgcggtg cccccactgg accaccgagg acggcttcga gatgcagttt ggcgttaacc 540
acctgggtca ctctctcttg acaaacttgc tgctggacaa gctgaaagcc tcagccccctt 600
cgcggatcat caacctctcg tccctggccc atgttgctgg gcacatagac tttgacgact 660
tgaactggca gacgaggaag tataacacca aagccgccta ctgccagagc aagcttgcca 720
tcgtcctctt caccaaggag ctgagccggc ggctgcaagg tacgggggag ctaggctcgg 780
cctccctctt gctttactct gaggcctagag cggcctttcc atgacctag gcttggaatt 840
gggggggg 847
```

<210> 718

<211> 2086

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1863)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1913)
<223> n equals a,t,g, or c

<400> 718

```
gtaaacaaca ggactataaa tatcagagtg tgctgctgtg gctttgtgga gctgccagag 60
taaagcaaag agaaaggaag caggcccgtt ggaagtgggt gtgacaaccc cagcaatgtg 120
gagaagcctg gggcttgccc tggtctctctg tctcctccca tcgggaggaa cagagagcca 180
ggaccaaagc tccttatgta agcaaccccc agcctggagc ataagagatc aagatccaat 240
gctaaactcc aatggttcag tgactgtggt tgctcttctt caagccagct gatacctgtg 300
catactgcag gcatctaaat tagaagacct gcgagtaaaa ctgaagaaa aaggatattc 360
taatatctct tatattgttg ttaatcatca aggaatctct tctcgattaa aatacacaca 420
tcttaagaat aaggtttcag agcatattcc tgtttatcaa caagaagaaa accaaacaga 480
tgtctggact cttttaaatg gaagcaaaga tgacttcctc atatatgata gatgtggccg 540
tcttgatatat catcttggtt tgcccttttc cttcctaact tccccatatg tagaagaagc 600
cattaagatt gcttactgtg aaaagaaatg tggaaactgc tctctcacga ctctcaaga 660
tgaagacttt tgtaaacgtg tatctttggc tactgtggat aaaacagttg aaactccatc 720
gcctcattac catcatgagc atcatcacia tcatggacat cagcaccttg gcagcagtga 780
gctttcagag aatcagcaac caggagcacc aaatgctcct actcatcctg ctccctccagg 840
ccttcatac caccataagc acaagggtca gcataggcag ggtcaccag agaaccgaga 900
tatgccagca agtgaagatt tacaagattt acaaaagaag ctctgtcgaa agagatgtat 960
aatcaatta ctctgtaaat tgcccacaga ttcagagttg gctcctagga gctgatgctg 1020
ccattgtcga catctgatat ttgaaaaaac aggggtctgca atcacctgac agtgtaaaga 1080
aaacctccca tctttatgta gctgacaggg acttcgggca gaggagaaca taactgaatc 1140
ttgtcagtga cgtttgcctc cagctgcctg acaaataagt cagcagctta taccacaga 1200
agccagtgcc agttgacgct gaaagaatca ggcaaaaaag tgagaatgac cttcaaacta 1260
aatatttaaa ataggacata ctcccaatt tagtctagac acaatttcat ttccagcatt 1320
tttataaact accaaattag tgaacaaaa atagaaatta gatttgtgca aacatggaga 1380
aatctactga attggcttcc agattttaaa ttttatgtca tagaaatatt gactcaaacc 1440
atatttttta tgatggagca actgaaaggt gattgcagct tttggttaat atgtcttttt 1500
ttttcttttt ccagtgttct atttgcttta atgagaatag aaacgtaaac tatgacctag 1560
gggtttctgt tggataatta gcagtttaga atggaggag aacaacaaag acatgctttc 1620
catttttttc tttacttata tctcaaaaca atattacttt gtcttttcaa tcttctactt 1680
ttaactaata aaataagtgg attttgtatt ttaagatcca gaaatactta acacgtgaat 1740
attttgctaa aaaagcatat ataactattt taaatatcca tttatctttt gtatatctaa 1800
gactcatcct gatttttact atcacacatg aataaagcct ttgtatcttt ctttctctaa 1860
tgntgkatca tactcttcta aaacttgagt ggctgkctta aaagatataa ggngaaagtg 1920
gcctatgtgg aagcctacca ggaggttaagg gtgagccgac cgcgcctcat ttgagaggtg 1980
gacgggggat atacacggga aaaaacgttc gggccttgag ttcggcggtt ggggttgcta 2040
cgcccgctg gccgcttgac cgcggactcc cgctcgctc gcaaac 2086
```

<210> 719
<211> 2418
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2200)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2211)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2347)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2384)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2393)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2401)

<223> n equals a,t,g, or c

<400> 719

```

nnggacgcgt gggtagcggt gcgagaagac gacagaaggg gggagtcaag ggcctttgcc 60
cgccttggcg gccggctcta cgtccctgt tctcgctgc agctccgcca tggctcctaa 120
aggcagctcc aaacagcagt ctgaggagga cctgctcctg caggatttca gccgcaatct 180
ctcggccaag tctccgcgc tcttcttcgg aaacgcgttc atcgtgtctg ccatcccat 240
ctggttatac tggcgaatat ggcataatgga tcttattcag tctgctgttt tgtatagtgt 300
gatgacccta gtaagcacat atttggtagc ctttgcatatc aagaatgtga aatttgttct 360
caagcacaaa gtagcacaga agaggagga tgctgtttcc aaagaagtga ctcgaaaact 420
ttctgaagct gataatagaa agatgtctcg gaaggagaaa gatgaaagaa tcttggtggaa 480
gaagaatgaa gttgctgatt atgaagctac aacattttcc atcttctata acaacactct 540
gttcttggtc gtggtcattg ttgcttcctt cttcatattg aagaacttca accccacagt 600
gaactacata ttgtccataa gtgcttcac aggactcatc gccctcctgt ctactggctc 660
caaatagacc atgtcagctt caccctctgg ctttgtgtct atgggtggcc tgtggtatat 720
ggaaaagtat cagggtggtc aggggtggag acacaagatg tttttatagt ctagagcctt 780

```

taaaaaaccc agcagaatgt aattcagtat ttgtttattg gctgtttttt gacagattgt 840
tgaaattaaa tgaattgaaa gggaaactca gagtactagg acgtttatta aaaggaaaaa 900
aatgtcttgc aatgtgctgt aatcacaaga ggagaaaata acttgtttcc ttgatctgtc 960
agaggtcaca gtaacctggg ccgagctgtt attatttatt atataatagt agtaggaagt 1020
taataactgg ttctctgtgt tccaagcaca atattacaac ttcttttgaa ccgtaaatat 1080
cagaatgaat cctcttccca ggggattgaa cagaagctta atgtttacaa gtgtttgaat 1140
ttgtgatctg aaataacaca aaattaaaaa catgatttct ctaattttcc aactagagga 1200
agagaaactt gtggaaaagt tctttttttt tctttttttt ttcttaaaga agggcagcca 1260
aggtagtaac ctaaaaaatg tgcccaggca tatgagagtt gtcctacgag gttaaagaac 1320
acactgttcc actgtatggc tttggccctg agtggccagg gaggtcaact tgacctgcc 1380
atgttggttt gacttactaa gacacaggaa tcattgtttt ccttgaccag ggtctcacac 1440
cctggaggaa tgtaagtaa gagaaagaac ctctttcctg aatattgaca tgtaaaagac 1500
caaagtaatt ttctgaact tctgcaattc tgagaactct ccaaggaatt tacagtgatt 1560
ttagtgttg tcagcathtt tccatgagga ctttcataca ttgactctt tagttcacag 1620
gttcccattg attgtgagca agatatttat ctcttttagcc cttggggatc cagctgagag 1680
caatctcttg cattttttta cccgtgtatg tacagatata atttcttggt tatgccatga 1740
cttgaanaag tttgggaagc tctttagcaa tatcagctaa aaggatatga aatcacaggt 1800
gatagcagtt gtcattcagt aatttcctac aagcagcacc ccaaaggaaa tatagtccta 1860
atctttacta tccacttcta aatttaattg gaatttcata catgttatta gttgttttct 1920
ttataatttt ataaaaatta ttcacgagg gtttaacttc cacttccatg ctatcggatg 1980
tgttgggctc catgcaagaa cttggaagaa aaacaggcag gaatgcattt gcataatgac 2040
ccagatcatc attttctgca actgagaatt atatttcata attgcttcta gaagtctgca 2100
attctttact tttctttggt gcattattat ctagggtcca tcaactggata atgtggagt 2160
actagagaag tcayatatca ctgtaaggta cagttagggn taacacttta naggtttatt 2220
atttttaaaa aacttttctt gaactcctgg gccaacatgg gtgaaaacccc gtcttcttac 2280
ttaaaaatac ccaaaattag gccaggggag tggatgggtg ggggtgcctgt taatcttcag 2340
ctacttnggg gagggcttga agccaggagg gaactgccct gganccccgg ggngggccag 2400
naggtttgcc agttgagt 2418

<210> 720

<211> 2541

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1149)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1209)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2527)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2538)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2540)

<223> n equals a,t,g, or c

<400> 720

```
gggagctagg agctggcggc gacggccaca ggggcggcga cggcgagtg cgaagcgaaa 60
cagcaccgga cagctacaaa gtgcaagata agaaaaatgc ctccagccgc cctgcctctg 120
caatttcagg aaaaaataac aaccactcag gaaataaacc agaccctccg cctgtgttac 180
gtgttgatga cgggcagcgg ctggcccggg agcgacgtga ggaacgggag aaacagctag 240
ctgcaagaga aatagtgtgg ttagaaaagag aagagcgagc caggcagcac tacgagaagc 300
acctggaaga gcggaagaag aggttgagg agcagaggca gaaggaggag cggaggaggg 360
ctgctgtgga ggagaagcgg aggcagagac ttgaggagga caaagaacgc cacgaagctk 420
ttgtacggcg cacaatggaa aggagccaga agccaaaaca gaagcataac cgttggtcgt 480
ggggaggctc tytccatggg arccctagca tccacagtgc agctcgccgc ctgcagctca 540
gcccatggga gagcagcgtt gttaacagac tcctgacgcc cacacattcg ttcctggcca 600
cctataaaaag cacagctgcc ttgtctggag aagcagcatc ttgcagcccc atcatcatgc 660
gagtaaaaag tgcacactct agaaattcga tggatcgacc aaaactcttt gtaacaccac 720
ctgaggggctc ttctcgagg aggatcattc atggcacagc gagctataaa aaagaaagag 780
agagagaaaa tgtactcttc ctcacatctg gcaccggaag ggctgtatct ccatctaate 840
ccaaagcaag acaaccagct cgctcccgac tttggcttcc gtccaagtct cttcctcatt 900
tgcttgccac acccagaccg acatcctcct tgccaccggg ctccagcaca gctgtcctg 960
ctcakgtccg gccccatcc cccggcaaca tccgccctgt caagagggaa gtcaaagtgg 1020
agcctgagaa gaaagatcct gagaaggaac ctccagaaagt tgccaatgag ccctcactaa 1080
agggcagagc accttttagt aaggtagaag aagccacagt tgaagagcgg acacctgctg 1140
aaccagaant tggcctgctg ctccagccat ggccccagct ccagcctcgg ccccagctyc 1200
agcctcggnc ccagctccag ccccggtccc caccaccagc atggtctcag ccccgctac 1260
cactgtgaat gccagtgtt ctgttaagac ttctgcaggc accaccgacc cagaggaggc 1320
cacaaggctt ctagtctaga agaggcggct ggcccagag cagagagaaa aggaagaaag 1380
ggagaggagg gagcaggaa agcttgaaag acaaaagaga gaggaattgg ctcaacgtgt 1440
ggctgaagag aggacgact gccgtgagga ggagtcgcgc aggctggaag ccgagcaggc 1500
ccgggagaa gaggagcagc tgcagcggca ggcggaggag cgggcgctgc gcgagtggga 1560
ggaggcagag cgcgcccaga ggcagaaaga agaagaagct cgcgttcgtg aagaagcaga 1620
gaggggtccg caggaaagag agaagcattt ccagagagaa gagcaagagc gcctggagag 1680
aaagaagcga cttgaggaga ttatgaaaag aaccaggaga acagaagcta cagataagaa 1740
aaccagtgat cagagaaacg gtgatatagc caaggagct ctcactggag gaacagaggt 1800
gtctgcactt ccatgtacaa caaacgctcc gggaaatgga aagccagttg gcagcccaca 1860
tgtggttacc tcacaccagt caaaagtgc agtgagagag actcccgatt tggaaaaaca 1920
accaaagtaa aatggtgtat ctgttcagaa tgaaaatatt gaagaaatta taaacttacc 1980
cattggatct aaaccatcca gattgatgt caccaacagt gagagcccag aaattccttt 2040
gaatccaatt ttggcctttg atgatgaagg gacacttggg cccctgcctc aggtagatgg 2100
tgttcagaca cagcagactg cagaagttat atgagtgttt cttctgaaga accaaagctg 2160
aaatttaatg agaatttcta caattaatgg aattcctttc ctgctataaa ggagcatccc 2220
ctccaccggt tttctagagt tcttgacct cttttgaaa agatttatta aaactagcta 2280
aagacaacag actgtagatc ttttctaata atttcatcaa taggaaaaaa gaaatacgtc 2340
tcattcttca atactttaaa atggcttttt ccagtgtgct cttcttagc aatcaatatt 2400
tttctgcatt ctttaaaaga caagagaatt tgggttataa aagaaatggg ctgactargc 2460
akgatttttt kggctctaaa agcttaacat gtaaaattgg caaaaaaaa aaaaaggggg 2520
```

ggccgcnccta aaggaccnan g

2541

<210> 721

<211> 2171

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1996)

<223> n equals a,t,g, or c

<400> 721

tccanccacg acgtccggga cgctggactt tgatgaagtt gtgaatgatg cagatatcat 60
tctggtggag ttttatgccc catggtgtgg acaacttgccc ccgagtatga 120
gaaggccgcc aaggagctca gcaagcgttc tcctccaatt cccctggcaa aggtcgacgc 180
caccgcagaa acagacctgg ccaagaggtt tgatgtctct ggctatccca ccctgaaaat 240
tttccgcaaa ggaaggcctt atgactacaa cgcccccacga gaaaaatatg gaatcgttga 300
ttacatgata gagcagtcgc ggctccctc caaggagatt ctgaccctga agcagggtcca 360
ggagttcctg aaggatggag acgatgtcat catcatcggg gtctttaagg gggagagtga 420
cccagcctac cagcaatacc aggatgccgc taacaacctg agagaagatt acaaatattca 480
ccacactttc agcacagaaa tagcaaagtt cttgaaagtc tcccaggggc agttggttgt 540
aatgcagcct gagaaattcc agtccaagta tgagccccgg agccacatga tggacgtcca 600
gggctccacc caggactcgg ccatcaagga ctctgtgctg aagtacgccc tgcccctggt 660
tggccaccgc aaggtgtcaa acgatgctaa gcgctacacc aggcgcccc tggtggtcgt 720
ctactacagt gtggacttca gctttgatta cagagctgca actcagtttt ggcggagcaa 780
agtcctagag gtggccaagg acttccctga gtacaccttt gccattgcgg acgaagagga 840
ctatgctggg gaggtgaagg acctggggct cagcgagagt ggggaggatg tcaatgccgc 900
catcctggac gagagtggga agaagttcgc catggagcca gaggagtttg actctgacac 960
cctccgcgag tttgtcactg ctttcaaaaa aggaaaactg aagccagtca tcaaatccca 1020
gccagtggcc aagaacaaca agggaccctg caaggctcgt gtgggaaaga cctttgactc 1080
cattgtgatg gacccaaga aggacgtcct catcgagttc tacgcgccat ggtgcgggca 1140
ctgcaagcag ctagaagccc tgtacaacag cctggccaag aagtacaagg gccaaaaggg 1200
cctggtcata gccaatatg acgccactgc caacgacgtc ccagcgacc gctataaggt 1260
ggagggtctc cccaccatct acttcgcccc cagtggggac aaaaagaacc cagttaaatt 1320
tgagggtgga gacagagatc tggagcattt gagcaagttt atagaagaac atgccacaaa 1380
actgagcagg accaaggaag agctttgaag gcctgaggtc tgcggaagg gggaggaggc 1440
agacgccctg cgtggcccat ggtcggggcg tccacgccga ggccggcaac aaacgacagt 1500
atctcggatt cctttttttt ttttttaatt tttttatact ttggtgtttc acttcatgct 1560
ctgaatactg aataaccatg aatgactgaa tagtttagtc cagattttta cagaggatac 1620
atctattttt atcattattht ggggtttgaa aaattttttt ttacaccttc taatthcttt 1680
atttctcaaa gcagataatt cttctgtgtg aaaatgtttt ctttttttaa tttaagggtt 1740
aaaattcctt ttccaaatca tgttgatttt gctctttgct ttttcgttgt ctgagaaatt 1800
gttggcgtag atttggtctc tggatgtgt ttctgattgc ttctgtttga gcacaaagt 1860
agagctgcca ctgagcagcc ctgccagggg tgctgtttca ggctgggcat cscaggcggc 1920
ctccctgcaa accaagggtt gggggcacaag gggcatgata cagggtcccc cagggtgggc 1980

tcagctccag ggagangcca cccacgtggc agccccacct cttgagagcc cccagtgccg 2040
gagcagaaaag gaccctggac ccagaggcag atactgcggg gtggtagaaa aggtagagta 2100
ggctgtggca atggaataaa acacgattaa aaacgttaar aaaaaaaaaa aaaaaaaaaa 2160
aaaaaaaaa a 2171

<210> 722

<211> 1888

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (787)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1875)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1878)

<223> n equals a,t,g, or c

<400> 722

gggctgcagg aattcggcmg mggcgggggtg ggtgcaagat gccgctgccg gttcaggtgt 60
ttaacttgca gggggccgtg gagcccatgc agatcgacgt ggacccccag gaagaccgcg 120
agaatgcacc tgacgtcaac tacgtggtgg agaaccacag cctggatctg gaacagtacg 180
cggccagcta cagcggcctg atgcgcacgc aacggctgca gttcattgct gatcactgcc 240
ccacgtgctg ggtggaggcc ctgaagatgg ccctctcctt cgtgcagaga acctttaacg 300
tgacatgta cgaggagatc caccgcaagc tctcagaggc caccaggagag ctgcagaacg 360
caccgcagcg catccctgag agcggcgtgg agccccagc cctggacacg gcctgggtgg 420
aggccacgcg gaagaaggcg ctgctgaagc tggagaagct ggacacagac ctgaagaact 480
acaagggcaa ctccatcaaa gagagcatcc ggcgcggcca cgacgacctg ggcgaccact 540
acctggactg tggggacctc agcaacgccc tcaagtgtta ttcccgggccc cgggactact 600
gcaccagcgc caaacacgtc atcaacatgt gcctcaatgt catcaaggtc agcgtctact 660
tgcagaattg gtctcatgtg ctacagctacg tcagcaaggc tgagtccacc ccagagattg 720
ccgagcagcg aggagagcgt gacagccaga cccaggccat cctcaccaag ctcaagtgtg 780
ccgcagnttg gcagagctgg ccgccaggaa gtacaagcag gctgccaagt gcctcctgct 840
ggcttccttt gatcactgtg acttccctga gctgctgtcc cccagcaacg tggccatcta 900
cgggtggcctg tgcgccttgg ctacctttga ccggcaggag ctgcagcgca atgtcatctc 960
cagcagctcc ttcaagttgt tcttggagct ggagccacag gtccgagaca tcatcttcaa 1020
attctacgag tccaagtacg cctcatgtct caagatgctg gacgagatga aggacaacct 1080
gctcctggac atgtatctgg cccccatgt caggaccctg tacaccacaga ttcgcaaccg 1140
tgccctcatc cagtatttca gccctacgt gtcagccgac atgcatagga tggcggcagc 1200
yttcaatacc acggtggccg ccctggaggga cgagctgacg cagctaattcc tggaggggct 1260
gatcagtgcc cgtgtggact cacacagcaa gatccatac gcccgggacg tggatcagcg 1320
cagcaccacc tttgagaagt ctctgttgat gggcaaggag ttccagcgcc gcgccaaggc 1380
catgatgctg cgggcagctg tgctccgcaa ccagatccat gtcaagtccc cgcccagaga 1440
agggagccag ggggagctga ctccagccaa cagccagtcc cggatgagca ccaacatgtg 1500

aggggtgaac cttggcctcc aggacatctg cccccctcc ccacctccac ggacctcgga 1560
cctccaggcg gctcagtgt gctgcgggc cagctaagg gctggccac tgggtgccac 1620
ccagcctgtg tggcctccct ggggctgagg aggcaggcgg ctgctagttg tggcccttcc 1680
tggaaggaga ggctgcagg gctcgaccct gtgggtttct gtccccaggg agcagactgt 1740
gcggcaccca gggccagtgg caccatttcc cagaccctc ctgttcccgc ctcagtcagg 1800
tgcagacaag tgggcggtgt ccattaaaga gcagactcag cgttaaaaaa aaaaaaaaaa 1860
aaaaaaaaa aaccncgngg ggggcccc 1888

<210> 723

<211> 980

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (968)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (972)

<223> n equals a,t,g, or c

<400> 723

ttcaagtgat tgtcccacct cagcctcctg aatagctggg attacagggt catgctacca 60
tgcctggcta ctttttgtgt ttttagcaga gacagggttt caccatgttg gtcagggtgg 120
tctcgaactc ctgacctcaa gtgggtccgtc tggtcggcc tcccaagggt ctgggattac 180
agggtgtgagc cactgcacct ggcctatata ggcttttttc ttaaacctat ttagtaatgt 240
tttcccaagt ttatttttta tttttaattt tttccccaag ttattttttc tatttttttt 300
tcatggaata atggggtaac ttagcagttt caatattgaa gactgaagtt taaaaaaaaa 360
ttaaattcaa ggtactttta aaattcagtt agaaaagtag gctttaaaaa ttattagaga 420
caagagtacc aaagcggtgt gtgtatgtgt gtgtgtgtat gcatgcttgt ggattggaaa 480
aactttggag actgattact tttcattata tatgtgtcac agtgaaacag cttttatgtg 540
tcatgtaaga ttactgcttg cctctctaag gaaggctgtg actgtttaaa tagacgggca 600
agggtggaacc ttttgaaaga tgagcttttg aatataagtt gtctgctaga tcatgggttg 660
tattgaacta acaagggttg cagatctgct gacttatata aagctttttg attcctacta 720
agctttaaga tttaaaaaat gttcaatggt gaaattttct tggggctcta tttttgcttt 780
ggctttcttg tgagagagt aggaagcatt ctttccttca ctaagtttgt ctttcttgtc 840
ttctggatag attgatttta agagactaag ggaatttaca aactaaagat tttagtcatc 900
tggtggaaaa ggagacttta agattgttta gggctgggag ggtgactca catctgtrrt 960
cccagcantt tngggaggcc 980

<210> 724

<211> 1812

<212> DNA

<213> Homo sapiens

<400> 724

cgcccggtc catcttgctg gagaccgggt tgggctgtga cgctgctgct ggggtcagaa 60
tgtcataccc aggtatcccc ccaacaggct acccaccttt ccctggatat cctcctgcag 120
gtcaggagtc atcttttccc ccttctgggc agtatcctta tcctagtggc tttcctccaa 180

```

tgaggaggagg tgcctaccca caagtgccaa gtagtggcta cccaggagct ggaggctacc 240
ctgcgcctgg aggttatcca gcccctggag gctatcctgg tgccccacag ccagggggag 300
ctccatccta tcccggagtt cctccaggcc aaggatttgg agtcccacca ggtggagcag 360
gcttttcttg gtatccacag ccaccttcac agtcttatgg aggtggtcca gcacagggtc 420
cactacctgg tggttttctt ggaggacaga tgccttctca gtatcctgga ggacaacctt 480
cttaccctag tcagcctgcc acagtgactc aggtcactca aggaactatc cgaccagctg 540
ccaacttcga tgctataaga gatgcagaaa ttcttcgtaa ggcaatgaag ggttttggga 600
cagatgagca ggcaatttgat gatgtggtgg ccaaccgttc caatgatcag aggcaaaaaa 660
ttaaagcagc atttaagacc tcctatggca aggatttaat caaagatctc aaatcagagt 720
taagtggaaa tatggaagaa ctgatcctgg ccctcttcac gcttcctacg tattacgatg 780
cctggagctt acggaaaagca atgcagggag caggaaactca ggaacgtgta ttgattgaga 840
ttttgtgcac aagaacaaat caggaaatcc gagaaattgt cagatgttat cagtcagaat 900
ttggacgaga ccttgaaaag gacattaggt cagatacatc aggacatttt gaacgtttac 960
ttgtgtccat gtgccaggga aatcgtgatg agaaccagag tataaaccac caaatggctc 1020
aggaagatgc tcagcgtctc tatcaagctg gtgaggggag actagggacc gatgaatctt 1080
gctttaacat gatccttgcc acaagaagct ttctcagct gagagctacc atggaggctt 1140
attctaggat ggctaatcga gacttgtaa gcagtgtgag ccgtgagttt tccggatatg 1200
tagaaagtgg tttgaagacc atcttgcatg gtgccctgaa ccgccctgcc ttctttgctg 1260
agaggctcta ctatgctatg aaagggtctg gcacagatga ctccaccctg gtccggattg 1320
tggtcactcg aagtgaattt gacctgttac aaataaaaca gatgttcgct cagatgtatc 1380
agaagactct gggcacaaatg attgcaggtg acacgagtg agattaccga agacttcttc 1440
tggtatttgt gggccagtag gagggatttt ttttttttta atgaaaaaaa atttctattc 1500
atagcttatc cttcagagca atgacctgca tgcagcaata tcaaaccatca gctaaccgaa 1560
agagctttct gtcaaggacc gtatcagggg aatgtgcttg gtttgacatc gttgttattg 1620
ccttaattct aattttatct tgttctctac atacaatcaa tgtaaagcca tatcacaatg 1680
atacagtaat attgcaatgt ttgtaaacct tcattcttac tagtttcatt ctaatcaaga 1740
tgtcaaattg aataaaaaatc acagcaatct ctgaaaaaaa aaaaaaaaaa aaaaaaaaaa 1800
aaaaaaaaaa aa 1812

```

<210> 725

<211> 974

<212> DNA

<213> Homo sapiens

<400> 725

```

cccggaacgt gatcagggtc tgtttgcaga ccggaacacg gttcctgggc tacaccagca 60
gcatggaagt tgtggggcct aacaccaaag gtcacccctt ctacaggggc aacgaagaca 120
ccccatacga agcagtgcac aggcacccct atccttgcat caaggccctg gccgagtggc 180
tggtcctgga ggccaacggg aggaagggtc gtgggggggt gcccttggtg acgtgtgccc 240
ttcgtcccac gggcatctac ggtgaaggcc accagatcat gagggacttc taccgccagg 300
gcctgcgcct gggaggttggt ctcttcgggg ccacccgggc ctctgtggag catggccggg 360
tctatgtggg caatgttgcc tggatgcacg tgctggcagc ccgggagctg gagcagcggg 420
cagccctgat gggcgccag gtatacttct gctacgatgg atcaccctac aggagctacg 480
aggatttcaa catggagtgc ctggggcccc tgcggactgc ggctggtggg cgccccccca 540
ttgctgcctt actggtgct ggtgttcctg gctgccctca atgccctgct gcagtggctg 600
ctgcgggcac tgggtgctta cgcacccctg ctgaacccct acacgctggc cgtggccaac 660
accaccttca ccgtcagcac cgacaaggct cagcgccatt tcggctatga gccctgttc 720
tcgtgggagg atagccggac ccgyaccatt ctctgggtac aggccgctac gggttcagcc 780
cagtacggtt ggggtctggg cctggaggcc cagatacagc acatccaccc aggtcccag 840
ccctcacacc ctggacggga agggacagct gcattccaga gcaggaggca gggctctggg 900
gccagaatgg ctgtccttgt cgtagagccc tccacatttt ctttttcttt ttgagacag 960

```


ggtcttgctc tggt

974

<210> 726

<211> 1508

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (309)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (360)

<223> n equals a,t,g, or c

<400> 726

```
gaggagatnc tgagggtgttt gagggtcctt cccgcactca gagggcctct ctggagccag 60
ttccaggcca cccatgggcc ttggcacgcg cccctactca tggttgccag attcgtggcc 120
ccaccatct cgaagccctt cggcccagga acccagggga agctgctgcc ctagcaatcc 180
tgaccgggac gacagatatt acaacgggtg ggagttctca ttccctcacc tggcttcagc 240
gcacttctcc cgacctactg gggcaaaccg aaggcgcccg ggagccggtc tctctgarga 300
gcaasggang caaagtgaag cttctggggg aaactgtgca gatgccctct ctgaactggn 360
cagaagcctg cccccacctc ctccctcttg tgaactgagc tgcccttagaa gggccggagg 420
aggagctgga gggcagctca gagccagagg agtggtgccc gccaatgcct gagagaagtc 480
acctgacgga gccagctcc agtggagggt gcctgggtcac cccatcccga agggaaaccc 540
cctctccac accttcctat ggacagcagt ccacagccac tcttacaccc tcacctcctg 600
accctcccca gcccacaact gacatgcccc atctccatca gatgccagc arggtgcccc 660
ttgggcccag tccccctctc agtgtatccc agcccatgct gggcatccgt gaagcgaggc 720
ctgctggctt ggggtgctggc cctgcagcct caccacacct cagccccagt cctgccccta 780
gcacagccag cagtgcccga ggcagaacct ggcaggggaa tggggagatg actccccac 840
ttcaaggacc ccgtgctcga ttccggaaga aaccgaaggc tcttccttac aggagggaga 900
acagtcctgg ggacttgccc ccaccacct tgccaccgcc agaggaagag gcgagctggg 960
ccctagagct gagggcagca ggcagcatgt cctccctgga gcgggagcgc agtggggaga 1020
ggaaagcggg ccaggccgtg cccctggcag cccagcgggt gctccacca gatgaagg 1080
cctggctccc atacagcaga ccaagcttcc tgtcccgggg ccagggcacc agcacatgtt 1140
ccacggccgg cagcaactct tccaggggct ccagcagctc taggggctcc cggggccctg 1200
gccggagccg gagtgcgagt cagagccgga gccagagcca aaggccagga cagaaacgcc 1260
gagaggaacc aagatgacct ttgttggggc attgagaata tcatgagtgc cacggggaag 1320
gggagtaggg atgtcttttc cccccagca gtgatgagtg gggctagctg aagccattg 1380
gtttccacga tttcaattgg ctgagaaggc agagagctag ctccctccctt tctttctttt 1440
tccacctgag acttgtttat aaaaaacaaa acaataaaaa gagtctgatc agaaaactct 1500
gccgaatt 1508
```

<210> 727

<211> 2004

<212> DNA

<213> Homo sapiens

<400> 727

```
gagagagtgc cgtatttcgc agattggagc tgagctgtgg ctgccagaag atagcgaacg 60
ataatctggc cctgtgtttt aaaaggtaca aagaaactaa agctatgac cctaacatag 120
aaggaatgga aactgaaagt ggaaatcagg aaaagatgtt gatatatcac tacttgtgtc 180
ttttaacaaa atgaaaaaat tgactactga tgggaagtta attgccagag cattgagaag 240
ttcagctgtt gtagagcttg atttggaagg caccagaatc cggaggaaaa aacctctggg 300
ggaaagacca aaggatgagg atgaacgcac agtgtatgtg gagttacttc caaaaaatgt 360
taatcacagc tggattgaaa gagtatttgg gaaatgtggc aatgttgttt atataagtat 420
accacattat aagtctactg gagatccaaa gggatttgcg tttgtggaat ttgaaacaaa 480
agaacaagca gcaaaaagcaa ttgagtttct taacaacca ccagaagaag caccaagaaa 540
acctggcata tttcctaaaa cagtgaaaaa taagccatt ccagccttaa gagtgtgga 600
agagaagaaa aagaaaaaga agaagaaagg ccgaatgaaa aaggaagaca atatccaagc 660
caaagaagaa aacatggaca caagcaacac cagcatcagt aaaatgaaaa gatccagacc 720
cacatctgag ggctctgaca ttgagtccac tgaaccccaa aagcagtgtc caaagaaaaa 780
gaaaaaacgg gacagagttg aagcatctag cttacctgaa gtcagaacag ggaagaggaa 840
gagaagcagc tctgaagatg cagaatccct agctccccga tcaaaagtaa agaaaattat 900
tcagaaagac atcatthaagg aagcatcaga agcttccaa gaaaatagag atatagaaat 960
ctctactgaa gaggaaaagg atactggaga tctaaaagat agctctctct tgaanaaaaa 1020
aaggaaacat aagaaaaaac ataaagagag acataaaatg ggagaagaag ttataccatt 1080
aagagtgtct tcaaaagagc aatggatgga tttgaaaaaa gagtatttag cgctacaaaa 1140
agctagcatg gcttctttta aaaaaacaat atcccaaata aaatcagagt cagaaatgga 1200
aacagacagt ggagtacctc aaaacactgg aatgaaaaat gaaaaaacag ccaacaggga 1260
agagtgtcgc acccaggaga aagttaatgc aacaggacca cagttcgtga gtggagtgat 1320
tgtgaagatc attagcacag agcctctacc tggcaggaaa caagtccggg atactttggc 1380
agcaatctca gaagttcttt atgttgattt gctagaaggg gatacagaat gccatgctag 1440
atttaaaact cctgaggatg ctcaagcagt aataaatgcc tatacagaaa ttaacaagaa 1500
acactgctgg aaactcgaga tcctttcttg tgatcacgaa caaaggatatt ggcagaagat 1560
tttggttgat agacaggcaa aacttaatca gcctcgggaa aagaaaagag gactgaaaa 1620
gttaatcacc aaagctgaaa agattagact ggcaaagact caacaagcga gtaaacatat 1680
aagattttct gaatatgatt gaaaaaaaaa acagttcacc tcttaatact tcacaagata 1740
cttgagctgt tcttgggaga ttacttttta ttatggtagc actgcataat taatgtgttt 1800
ttaattaaaa gaaatatctt tgttcctcaa cttgtaaata agactttttt ctagagacaa 1860
atatgatgta taccacaatt tttcttaaac attttatttg ttgaaattat cttagatgtc 1920
agtgtcaggt gatttagtaa ataaatgtgt tttgaacatt aaaaaaaaaa maaaaaaaaa 1980
ctcgaggggr agcccgmmcc ccaa 2004
```

<210> 728

<211> 1470

<212> DNA

<213> Homo sapiens

<400> 728

```
ctttcccgga gctcagtggt cgctcgcgca aggctaagg agtgtggcgg gcggctccgg 60
gagccaacat gcctcgggtat gcgcagctgg tcatgggccc cgcgggcagc gggaagagca 120
cctactgtgc caccatggtc cagcactgtg aagccctcaa ccggtctgtc caagttgtaa 180
acctggatcc agcagcagaa cacttcaact actccgtgat ggctgacatc cgggaactga 240
tcgaggtgga tgatgtaatg gaggatgatt ctctcgtatt cgggtcccaac ggaggattgg 300
```

tat t t t t g c a t g g a g t a c t t t g c c a a t a a t t t t g a c t g g c t g g a g a a c t g t c t t g g c c a t g 360
t a g a g g a c g a c t a t a t c c t t t t t g a t t g t c c a g g t c a g a t t g a g t t g t a c a c t c a c c t g c 420
c t g t g a t g a a a c a g c t g g t c c a g c a g c t c g a g c a g t g g g a g t t c c g a g t c t g t g g a g t t t 480
t t c t t g t t g a t t c t c a g t t c a t g g t g g a g t c a t t c a a g t t t a t t t c t g g c a t c t t g g c a g 540
c c c t g a g t g c c a t g a t c t c t c t a g a a a t t c c g c a a g t c a a c a t c a t g a c a a a a a t g g a t c 600
t g c t g a g t a a a a a a g c a a a a a a g g a a a t t g a g a a a t t t t t a g a t c c a g a c a t g t a t t c t t 660
t a t t a g a a g a t t c t a c a a g t g a c t t a a g a a g c a a a a a a t t c a a g a a a c t g a c t a a a g c t a 720
t a t g t g g a c t g a t t g a t g a c t a c a g c a t g g t t c g a t t t t t a c c t t a c g a t c a g t c a g a t g 780
a a g a a a g c a t g a a c a t t g t a t t g c a g c a t a t t g a t t t t g c c a t t c a a t a t g g a g a a g a c c 840
t a g a a t t t a a a g a a c c a a a g g a a c g t g a a g a t g a g t c t t c c t c t a t g t t t g a c g a a t a t t 900
t t c a a g a a t g c c a g g a t g a a t g a a g a g t t t a c t a a a a g t a a c c a t c t a a a g a g c t t g t g g 960
c c a a a c c a g c a g a a c a t t c t t c t c t t c a a a g g a t g c a a t a g t a g a a a g c t a c t t a t t t t a 1020
a t g a a a a a a a g t a a a a c t t c g t t c t t t a t c a g c c t c a t g c c t g a a t c a a a t t t t t a a t t a 1080
t t c t g a a a c t g c t g c t g t t t a a a g t g g a a t c t t t t a g t a t t a t a a c a g c a t c a c t t t a g a 1140
t t t t g t a a g t c a a a a t t g a a a t g a a t g c a c a t a g a t t t a t a t a t a a a t t a g c a c c t g a g c 1200
t a a g g t t a a g g c t g g t c t a a a c t t a t t t t c a c t t t t t g t a t t a t t t t t g a g a t g c a g g a a 1260
t t a c t g t a a c a a a a t a t g t a t g t c c g a a g g g a a a a a g c t g c a a g g a t a t a t a t a a g a c c a 1320
c t g c t t a t c t g t a t c t t c c c a t t t t c c t a t a t t g a a a a t g t a t a t t a t t t a t a t a a c t t a 1380
a a a a g t a a a a a t a a c t a t g t t t t g a g a t a t g t a t g t g t a t a t a t a a a a g a a a c a a a g g t t 1440
t t t a a t g a t t c t t g g a c c t a g a t a a c a a g t 1470

<210> 729

<211> 1755

<212> DNA

<213> Homo sapiens

<400> 729

a g c c g c g a g t c c a t t t t g g g g c t g t g c t t g g c g c g t a c c g t g c g g t c c c t g t a g t t g g a g 60
g a c g g g c g g t c g c g c g g c c t t t c c c a c t a g c c g g a g t a g c c t c t a g t t c g t t a g t c a a a a 120
c g t g a a a a a a a a g a c c t g c t t t g c c c t g g g a a a t a g t a a c c c t g c c a a a t a c a t c a g c t t 180
g t a g g a g a c a g a g g a t g t g a t g g a g c t g c t t g a a g a a g a t c t c a c a t g c c c t a t t t g t t g 240
t a g t c t g t t t g a t g a t c c a c g g g t t t t g c c t t g c t c c c a c a a c t t c t g c a a a a a t g c t t 300
a g a a g g t a t c t t a g a a g g g a g t g t g c g g a a t t c c t t g t g g a g a c c a g c t c c a t t c a a g t g 360
t c c t a c a t g c c g t a a g g a a a c t t c a g c t a c t g g a a t t a a t a g c c t g c a g g t t a a t t a c t c 420
c c t g a a g g g t a t t g t g g a a a a g t a t a a c a a g a t c a a g a t c t c t c c c a a a a t g c c a g t a t g 480
c a a a g g a c a c t t g g g g c a g c c t c t c a a c a t t t t c t g c c t g a c t g a t a t g c a g c t g a t t t g 540
t g g g a t c t g t g c t a c t c g t g g g g a g c a c a c c a a a c a t g t c t t c t g t t c t a t t g a a g a t g c 600
c t a t g c t c a g g a a a g g g a t g c c t t t g a g t c c c t c t t c c a g a g c t t t g a g a c c t g g c g t c g 660
g g g a g a t g c t c t t t c t c g t t t g g a t a c c t t g g a a a c t a g t a a g a g g a a a t c c c t a c a g t t 720
a c t g a c t a a a g a t t c a g a t a a a g t g a a g g a a t t t t t t g a g a a g t t a c a a c a c a c a c t g g a 780
t c a a a a g a a g a a t g a a a t t c t g t c t g a c t t t g a g a c c a t g a a a c t t g c t g t t a t g c a a g c 840
a t a t g a c c c a g a g a t c a a c a a a c t c a a c a c c a t c t t g c a g g a g c a a c g g a t g g c c t t t a a 900
c a t t g c t g a g g c t t t c a a a g a t g t g t c a g a a c c c a t t g t a t t t c t g c a a c a g a t g c a g g a 960
g t t t a g a g a g a a a a t c a a a g t a a t c a a g g a a a c t c c t t t a c c t c c c t c t a a t t t g c c t g c 1020
a a g c c c t t t a a t g a a g a a c t t t g a t a c c a g t c a g t g g g a a g a c a t a a a a c t a g t c g a t g t 1080
g g a t a a a c t t t c t t t g c c t c a a g a c a c t g g c a c a t t c a t t a g c a a g a t t c c c t g g a g c t t 1140
t t a t a a g t t a t t t t t g c t a a t c o c t t c t g c t t g g c c t t g t c a t t g t c t t t g g t c c t a c c a t 1200
g t t c c t a g a a t g g t c a t t a t t t g a t g a c c t g g c a a c t t g g a a a g g c t g t c t t t c a a a c t t 1260
c a g t t c c t a t c t g a c t a a a a c a g c c g a t t t c a t a g a a c a a t c a g t t t t t t a c t g g g a a c a 1320
g g t g a c a g a t g g g t t t t t c a t t t t c a a t g a a a g a t t c a a g a a t t t t a c t t t g g t g g t a c t 1380
g a a c a a t g t g g c a g a a t t t g t g t g c a a a t a t a a a c t a t t a t a a a a t c t g t t t c a a g t a t g 1440

cagttttctt ttgttagaaa ttgttagaga atagagagtg gtaattcaga tttgggtcaac 1500
gattctagtc acatatatttc ctccaaaagt attccttcca aaaataatct atacatgttc 1560
aaattaggta gcataaagat aaaagtgaat tttagtagta taggcctgaa cctttttttg 1620
tttaaaagag tgcttttgaa ataagcatcc accccaaatg ttgggtgtat ttatgctgtg 1680
ataaaaatag gtgagagatc atatgatcta atattgtatt gatggaagta taggtagtat 1740
agtagtgatt gttct 1755

<210> 730

<211> 437

<212> DNA

<213> Homo sapiens

<400> 730

gttttctttt ctccttcac ctttcttttc atttctagtg agacacacgc tttgggtcctg 60
gctttcggcc cgtagttgta gaaggagccc tgctggtgca ggttagaggt gccgcatccc 120
ccggagctct cgaagtggag gcggtaggaa acggagggct tgcggctagc cggagggaagc 180
tttggaagccg gaagccatgg cacactaccc cacaaggctg aagaccagaa aaacttattc 240
atgggttggc aggccttgt tggatcgaaa actgcactac caaacctata gagaaatgtg 300
tgtgaaaaca gaaggttgtt ccaccgagat tcacatccag attggacagt ttgtgttgat 360
tgaaggggat gatgatgaaa acccgatatg tgctaaattg cttgagttgt tcgaagatga 420
ctctgatcct cctccgt 437

<210> 731

<211> 3663

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3583)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3601)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3619)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3648)

<223> n equals a,t,g, or c

<400> 731

tcgaccacg cgtccgcatt gagataatta ctgataggca gtctggaaag aaaagaggct 60
ttggctttgt tacttttgat gaccatgatc ctgtggataa aatcgatttg cagaaatacc 120
ataccatcaa tggtcataat gcagaagtaa gaaaggcttt gtctagacaa gaaatgcagg 180

aagttcagag ttctaggagt ggaagaggag gcaacttttg ctttggggat tcacgtggtg 240
gcggtggaaa ttccggacca ggaccaggaa gtaacttttag aggaggatct gatggatatg 300
gcagtgagc tggatttggt gatggctata atgggtatgg aggaggacct ggaggtggca 360
attttgagg tagccccgt tatggaggag gaagaggagg atatggtggt ggaggacctg 420
gatatggcaa ccagggtggg ggctacggag gtggttatga caactatgga ggaggaaatt 480
atggaagtgg aaattacaat gattttggaa attataacca gcaaccttct aactacggctc 540
caatgaagag tggaaacttt ggtggtagca ggaacatggg gggaccatat ggtggaggaa 600
actatggtcc aggaggcagt ggaggaaagt ggggttatgg tgggaggagc cgatactgag 660
cttcttccta ttgcatgg gcttcactgt ataaatagga gaggatgaga gcccagaggt 720
aacagaacag cttcaggtta tcgaaataac aatgttaagg aaactcttat ctcagtcagt 780
cataaatatg cagtgatatg gcagaagaca ccagagcaga tgcagagagc cattttgtga 840
atggattgga ttatttaata acattacctt actgtggagg aaggattgta aaaaaaatg 900
cctttgagac agtttcttag ctttttaatt gttgtttctt tctagtggctc tttgtaagag 960
tgtagaagca ttccctcttt gataatgtta aattgttaag ttccagggtga catgtgaaac 1020
cttttttaag atttttctca aagttttgaa aagctatttag ccaggatcat ggtgtaataa 1080
gacataacgt ttttccttta aaaaaattta agtgcgtgtg tagagttaag aagctgttgt 1140
acatttatga ttttaataaaa taattctaaa ggaaattgtg taattataga ctttttat 1200
taataaagtt aaggagtggg tagtataatt aaggctccgtt gcaaagctgt tgttatatt 1260
gtataagata aatgctggct agatgtaagt gtgtgtctg caattcatca ggattaaatt 1320
atgtagataa ctttaaggat atctctgcaa ggagaaacac ctttttagat ctttttagatg 1380
ctgcttcttc aatgcaagga aaggaaataa cccagcgag gtactcttca gggacacagg 1440
tctagtacaa gagaactctt gacggctact aagttcagcc agtcttaaaa aactgtgctg 1500
tttctacaaa actttaacta cagtagttta taaggatgcc aacgaaagct gaggtgtgag 1560
agcaaaatag ttctaagctt cagttaaact tctttaggta agatcttatt tacttttctt 1620
ttcttaattt tctccctaa aagataaact aatactctta aatggtcttt cagtatagtg 1680
gttcttacgt agtttaacat agctataaat tgagtttaac aatttataaa ctcaagagaa 1740
taatttttat aaacctgtt ttccaatctg tcatttactt aaattatttt ggtgttttt 1800
ccctttttt ccttcttttc ccacccctc cccctccatg tgaagatttg ggtgcttaac 1860
atatcatttt tttccctgcc ggaatttttag cattgatatg aaccatggac aagtatattc 1920
tgctgccaca aagactgtaa agtgcttcat ttcaacagct gaggcaagcc aagtgatcat 1980
taataaagct tttcttggtt ccttcagtgg tgttgtagt aaaatggtag gtaaaagtta 2040
ggctgcaagt tcaataaatc atgagatttc ccacgttac acccttggtt attcacattt 2100
cttgatcaa acattttgag tgaactaggg gtttttatta aagacatttg ttgtatttat 2160
ggttgtaact gtacatgctt atcaggatga gactgaaaga aggtagggca aaaatgggtg 2220
aatctatttt cagatagtag ttcatcttg agtgaagtgt cttgtctgca ttatgaagcc 2280
tggtatgtat ccagtactaa atagggtggg taaatgtggg aattctagtt cagtgtctta 2340
ccctgaagag aaagtgtgag gttggctgtt gaaattcatt ccttagatat gatcagtttg 2400
attgcccgcc tttattgcct ttacaggaat gtgatactca gggcttactc tatacaccaa 2460
tgagtcttct ttgatcctaa gaccaccact gaagtgttt aggttctttt ggacaaacat 2520
gataaacttc ttcagatact ttttttttcc tttggcagga aggtgtcttg ctgcaggtaa 2580
ctaataagaa agtggtcaac cacagagtct tcaagaaata agaaattctg taccatctga 2640
aagtagttct tgttggtgcc ttcatttaaa aagcactctt taaaataaaa gggaaatgtt 2700
ttctgataaa acaaacattt agttgaggtt cttgatataa aacaattaca aaatgagtg 2760
tgtttgtaaa acagtaacat caaattggct agagagataa atgtatcatg ttttaatta 2820
ggttttgta gtagacagat tacaattcta ttttaatat aaagtttata aaataaatac 2880
tttttgatc caaatacttg gtgtaatgtt tacacataaa atgtgtgaat cttgttctat 2940
aaatatttg tttgtctaaa gatcaccatc ccttaattt ttaaaagcag ttccacaaag 3000
ctatgcata ttttaattta acaggtaaat gagaagagca ttgtggacat tattggctgt 3060
ccccataaaa atgctgttca ttatgcactg tatattcagc gtttgagtac tcctaaagtt 3120
tctggcttta cttttacgtt tagcaatact ggtggcattt tgaaaatcat ggatttttaa 3180
ggttaaccgg ctggagtggg ccagattaa ggtctttgca gaagcactga ggtttacaat 3240

```

atgtgctaga ttgtcaaagt tcaattagtt ttatttgtgt ttacactgag taaatgaata 3300
tcagtgttgc tttttaaatg tgtttatatt gacatttata tgaattaaga aaacccaaaa 3360
gaccaggtta atttgtttct atgataatct gttttgtgtt tgataatgtg aggtatctaa 3420
caggtaagtc aaatttaaca gcaggtaaca catagaaagc agctttctgt ttgaaatagc 3480
tgagtctgtc aattaaagac gtacaaatat cccaacttta agaaaatttt gaagggttaa 3540
aaatgtgtgg atgtcaaaga cgttgaactt tgaaatacat cangttgata tgcataacct 3600
naaaatacca actcctatnc agccaagggt caagggaata ttacacanat agggggagaa 3660
tta 3663

```

<210> 732

<211> 2017

<212> DNA

<213> Homo sapiens

<400> 732

```

gggtgacttag gacggggcga tggcggtga gaggagctgc gcgtgcgcga acatgtaact 60
gggtgggatct gcggcggtc ccagatgatg gtcgtcctcc tgggcgcgac gaccctagt 120
ctcgtcgccg tggcgccatg ggtgttgtcc gcagccgcag gtggaaaaaa tctaaaatct 180
cctcaaaaag tagaggctga catcatagat gacaacttta tctgaggtg gaacaggagc 240
gatgagtctg tcgggaatgt gactttttca ttcgattatc aaaaaactgg gatggataat 300
tggataaaat tgtctgggtg tcagaatatt actagtacca aatgcaactt ttcttcaact 360
aagctgaatg tttatgaaga aattaaattg cgtataagag cagaaaaaga aaacacttct 420
tcatgggtatg aggttgactc atttacacca tttcgcaaag ctccagattg tctccagaa 480
gtacatttag aagctgaaga taaggcaata gtgatacaca tctctcctgg aacaaaagat 540
agtgttatgt gggctttgga tggtttaagc tttacatata gcttasttat ctggaaaaac 600
tcttcagggtg tagaagaaag gattgaaaat atttattcca gacataaaat ttataaactc 660
tcaccagaga ctacttattg tctaaaagtt aaagcagcac tacttacgtc atggaaaatt 720
gggtgtctata gtccagtaca ttgtataaag accacagttg aaaatgaact acctccacca 780
gaaaatatag aagtcagtg ccaaaatcag aactatgttc ttaaatggga ttatacatat 840
gcaaacatga cttttcaagt tcagtggtc cagcctttt taaaaggaa tcttggaac 900
catttgata aatggaaaca aatacctgac tgtgaaaatg tcaaaactac ccagtgtgtc 960
tttctcaaaa acgttttcca aaaaggaatt taccttctcc gcgtacaagc atctgatgga 1020
aataacacat ctttttggtc tgaagagata aagtttgata ctgaaatata agctttccta 1080
cttctccag tctttaacat tagatccctt agtgattcat tccatatcta tatcgggtgt 1140
ccaaaacagt ctggaaacac gcctgtgatc caggattatc cactgattta tgaaattatt 1200
ttttgggaaa acacttcaaa tgctgagaga aaaattatcg agaaaaaac tgatgttaca 1260
gttcctaatt tgaaccact gactgtatat tgtgtgaaag ccagagcaca caccatggat 1320
gaaaagctga ataaaagcag tgtttttagt gacgtgtat gtgagaaaac aaaaccagga 1380
aatacctcta aaatttggt ttagtttga atttgtattg cattatttgc tctccggtt 1440
gtcatttatg ctgcgaaagt cttcttgaga tgcataaatt atgtcttctt tccatcactt 1500
aaaccttctt ccagtataga tgagtatttc tctgaacagc cattgaagaa tcttctgtt 1560
tcaacttctg aggaacaaat cgaaaaatgt ttcataattg aaaatataag cacaattgct 1620
acagtagaag aaactaatca aactgatgaa gatcataaaa aatacagttc ccaactagc 1680
caagattcag grrattattc taatgaagat gaaagcgaaa gtaaaacaag tgaagaacta 1740
cagcaggact ttgtatgacc agaaatgaac tgtgtcaagt ataaggtttt tcagcaggag 1800
ttacactggg agcctgaggt cctcaccttc ctctcagtaa ctacagagag gacgtttccc 1860
tgtttaggga aagaaaaaac atcttcagat cataggtcct aaaaatacgg gcaagctctt 1920
aactatttaa aatggaatta caggccgggc acgtggctca cactgtaatc cagcactttg 1980
gaggctgagg aggcagacat gaggtcagag atcgaga 2017

```

<210> 733

<211> 2004
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2001)
<223> n equals a,t,g, or c

<400> 733
cggacgcgtg ggagctgagt cgaggtggac cctttgaacg catcgcccta cagccgctga 60
ttccccccgc atgcctccc gtggaagccc aggcccgctt cgcagcttcc tccctttgtc 120
tcataaccat gtccaccaac gagaatgcta atacaccagc tgcccgtctt cacagattca 180
agaacaaggg aaaagacagt acagaaatga ggcgtcgcag aatagaggtc aatgtggagc 240
tgaggaaaagc taagaaggat gaccagatgc tgaagaggag aaatgtaagc tcatttcctg 300
atgatgctac ttctccgctg caggaaaacc gcaacaacca gggcactgta aattggtctg 360
ttgatgacat tgtcaaaggc ataaatagca gcaatgtgga aaatcagctc caagctactc 420
aagctgccag gaaactactt tccagagaaa aacagccccc catagacaac ataatccggg 480
ctggtttgat tccgaaattt gtgtccttct tgggcagaaac tgattgtagt cccattcagt 540
ttgaatctgc ttgggcactc actaacattg cttctgggac atcagaacaa accaaggctg 600
tggtagatgg aggtgccatc ccagcattca tttctctgtt ggcactctcc catgctcaca 660
tcagtgaaca agctgtctgg gctctaggaa acattgcagg tgatggctca gtgttccgag 720
acttggttat taagtacggt gcagttgacc cactgttggc tctccttgca gttcctgata 780
tgtcatcttt agcatgtggc tacttacgta atcttacctg gacactttct aatctttgcc 840
gcaacaagaa tcctgcaccc ccgatagatg ctggtgagca gattcttctt acctagttc 900
ggctcctgca tcatgatgat ccagaagtrt tagcagatac ctgctgggct atttcctacc 960
ttactgatgg tccaaatgaa cgaattggca tgggtggtgaa aacaggagtt gtgccccaac 1020
ttgtgaagct tctaggagct tctgaattgc caattgtgac tcctgcccta agagccatag 1080
ggaatattgt cactggtaca gatgaacaga ctgaggttgt gattgatgca ggagcactcg 1140
ccgtctttcc cagcctgctc accaacccca aaactaacat tcagaaggaa gctacgtgga 1200
caatgtcaaa catcacagcc ggccgccagg accagataca gcaagttgtg aatcatggat 1260
tagtcccat ccttgctcagt gttctctcta aggcagattt taagacacaa aagggaagctg 1320
tgtgggccgt gaccaactat accagtgggtg gaacagttga acagattgtg taccttggtc 1380
actgtggcat aatagaaccg ttgatgaacc tcttaactgc aaaagatacc aagattattc 1440
tggttatcct ggatgccatt tcaaatatct ttcaggctgc tgagaaacta ggtgaaactg 1500
agaaacttag tataatgatt gaagaatgtg gaggcttaga caaaattgaa gctctacaaa 1560
accatgaaaa tgagtctgtg tataaggctt cgtaagctt aattgagaag tatttctctg 1620
tagaggaaga ggaagatcaa aacgttgtag cagaaactac ctctgaaggc tacactttcc 1680
aagttcagga tggggctcct gggaccttta acttttagat catgtagctg agacataaat 1740
ttgttggtga ctacgtttgg tattttgtct tattgtttct ctactaagaa ctctttctta 1800
aatgtggttt gttactgtag cactttttac actgaaacta tacttgaaca gttccaactg 1860
tacatacata ctgtatgaag cttgtcctct gactaggttt ctaatttcta tgtggaattt 1920
cctatcttgc agcatcctgt aaataaacat tcaagtccac ccttttcttg acttcaaaaa 1980
aaaaaaaaaa aaaaaagggg nggc 2004

<210> 734
<211> 1128
<212> DNA
<213> Homo sapiens

<220>

<221> misc feature
<222> (1105)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1117)
<223> n equals a,t,g, or c

<400> 734
ctcggagccg ttgggtcggt tcctgctatt cgggcgcctc cactccgtcc cccgcggggtc 60
tgctctgtgt gccatggacg gcattgtccc agatatagcc gttggtacaa agcggggatc 120
tgacgagctt ttctctactt gtgtcactaa cggaccgttt atcatgagca gcaactcggc 180
ttctgcagca aacggaaatg acagcaagaa gttcaaaggt gacagccgaa gtgcaggcgt 240
cccctctaga gtgatccaca tccggaagct ccccatcgac gtcacggagg gggaaagtc 300
ctccctgggg ctgccctttg ggaaggtcac caacctcctg atgctgaagg ggaaaaacca 360
ggccttcacg gagatgaaca cggaggaggc tgccaacacc atggtgaact actacacctc 420
ggtgacccct gtgtgcgcg gccagcccat ctacatccag ttctccaacc acaaggagct 480
gaagaccgac agctctccca accaggcgcg ggcccaggcg gccctgcagg cggatgaactc 540
ggtccagtcg gggaaacctg ccttggtgctc ctcggcgcg gccgtggacg cagggatggc 600
gatggccggg cagagccccg tgctcaggat catcgtggag aacctcttct accctgtgac 660
cctggatgtg ctgcaccaga tttctccaa gttcggcaca gtgttgaaga tcatcacctt 720
caccaagaac aaccagtcc aggcctgct gcagtatgcg gaccccgta gcgccagca 780
cgccaagctg tcgctggacg ggcagaacat ctacaacgcc tgctgcacgc tgcgcacga 840
cttttccaag ctcaccagcc tcaacgtcaa gtacaacaat gacaagagcc gtgactacac 900
acgccagac ctgccttccg gggacagcca gccctcgtg gaccagacca tggccgcggc 960
cttcggtgca cctggtataa tctcagctc tccgtatgca ggagctggtt tccytcccam 1020
ctttgccatt cctcaagctg caggctttcc gttccgaacg tccacgsgc cctggccctt 1080
ggcgcgcacc gagccgcgct ggctnctgat cgctcanggc accgctgt 1128

<210> 735
<211> 772
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (661)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (693)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (699)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (741)

<223> n equals a,t,g, or c

<400> 735

```
ttttttttgt gca gctc gctg ggaaggaagg agacgcctaa accgcggcac tgcccggttt 60
gagcgtacca aacctgcccc ccggttttgt agccccgatt ctctgtgttt tgctcccgtc 120
tccgacgaga gaggcggcga cgggtggcgtc tgcgacggga gacagcgcgt cggagc gaga 180
gagcgtcgcg cctgcgcgcc ccccaacagc ggagggcgccg ccgccatcgg tcgtcaccag 240
accggagccg cagcctcccc agcccggcca tccgtgcccc gctcccagat ctctatcctt 300
ttgggacctat gcgcggagga ggctttgggg accgggaccg ggatcgtgac cgtggaggat 360
ttggagcaag aggtgggtgtt ggccttcccc cgaagaaatt tggtaatcct ggggagcgtt 420
tgcgtaaaaa aaagtgggat ttgagt gacg tccccagtt tgagaaaaat ttttatgttg 480
aacatccgga agtagcaagg ctgacacctat atgaggttga tgagctacgc cgaaagaagg 540
agattacagt gaggggggga gatgtttgtc ctaaaccctg gtttgccttc catcatgcta 600
acttcccaca atatgtaatg gatgtgttga tggactcacg cactttacag gataacatca 660
ngggtagact ttgacttgga gaaaaccaag atncttgcng cttggctcct ggtggtggcc 720
cccatccca gctgtggcat ngcacacaca aggacacctt ttctaagtta tg 772
```

<210> 736

<211> 1099

<212> DNA

<213> Homo sapiens

<400> 736

```
ggcacgaggg aatgtttcct ccatttaaa gtagatgttc tgggctggat aaaaaagcca 60
aatacatttt attgatggac attatagctg ctgatgactg tcgttataaa tttcacaatt 120
ctcgggtggat ggtggctggt aakgccgacc ccgaaatgcc aaagaggatg tacattcacc 180
cggacagccc cgctactggg gaacagtgga tgtccaaagt cgtcactttc caaaaactga 240
aactcaccaa caacatttca gacaaacatg gattttacttt ggccttccca agtgatcacg 300
ctacgtggca ggggaattat agtttttggt ctcagactat attgaactcc atgcacaaat 360
accagccccg gttccacatt gtaagagcca atgacatctt gaaactccct tatagtacat 420
ttcggacata cttgttcccc gaaactgaat tcatcgctgt gactgcatac cagaatgata 480
agataaccca gttaaaaaata gacaacaacc cttttgcaaa aggtttcccg gacactggaa 540
atggccgaag agaaaaaaga aaacagctca ccctgcagtc catgagggtg tttgatgaaa 600
gacacaaaaa ggagaatggg acctctgatg agtcctccag tgaacaagca gctttcaact 660
gsttcgcccc ggcttcttct ccagccgcct ccactgtagg gacatcgaac ctcaaagatt 720
tatgtcccag cgagggtgag agcgacgccg aggccgagag caaagaggag catggccccg 780
aggcctgcga cgcggccaag atctccacca ccacgtcgga ggagccctgc cgtgacaagg 840
gcagccccgc ggtcaaggct cacccttttcg ctgctgagcg gccccgggac agcgggcggc 900
tggacaaaag gtcgcccgcac tcacgccata gccccgccac catctcgtcc agcactcgcg 960
gcctgggcgc ggaggagcgc aggagccccg ttcgcgaggg cacagcgcgg gccaaaggtg 1020
aagaggcgcg cgcgctcccc ggcaaggagg ccttcgcgcc gctcacggtg cagacggacg 1080
cggccgcaag cttattccc 1099
```

<210> 737

<211> 3219

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3212)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3215)

<223> n equals a,t,g, or c

<400> 737

```
catatgggttt tgcgtccatt cctccttcgt cgaattaagg ctgatgttga aaagagtttg 60
cctccaaaaga aggaagtaaa aatctatgtg ggccctcagca aaatgcaaag ggaatgggtat 120
actcggatat taatgaagga tatagatata ctcaactcag caggcaagat ggacaaaatg 180
aggttattga acatcctaatt gcagttgagw raatgttgta atcatccata tctctttgat 240
ggagcagaac ctggtccacc ttatacaaca gatatgcata tagtaaccaaa cagtggcaaaa 300
atgggtgggtt tagacaagct gctccctaag ttaaaagaac aagggttcacg agtactaatc 360
ttcagtcaaa tgacaagggt attggacatt ttggaagatt attgcatgtg gagaaattat 420
gagtactgca ggttggtatg tcagacaccc catgatgaga gacaagactc catcaatgca 480
tacaatgaac caaacagcac aaagtttggt ttcatgttaa gcacgcgtgc tgggtggtctt 540
ggcatcaatc ttgcgactgc tgatgtagta attttgtatg attctgattg gaatccccaa 600
gtagatcttc aggttatgga ccgagcacat agaattgggc agactaagac agtcagagtg 660
ttccgcttta taactgataa cactgtagaa gaaagaatag tagaacgtgc tgagatgaaa 720
ctcagactgg attcaatagt cattcaacaa gggaggcttg tggatcagaa tctgaacaaa 780
attgggaaag atgaaatgct tcaaatgatt agacatggag caacacatgt gtttgcttca 840
aaggaaagtg agatcactga tgaagatatc gatgggtattt tggaaagagg tgcaaagaag 900
actgcagaga tgaatgaaaa gctctccaag atgggcgaaa gttcacttag aaactttaca 960
atggatacag agtcaagtgt ttataacttc gaaggagaag actatagaga aaaacaaaag 1020
attgcattca cagagtggat tgaaccacct aaacgagaaa gaaaagccaa ctatgccgtt 1080
gatgcataatt tcagggaagc tcttcgtgtt agtgaaccta aagcacccaa ggctcctcga 1140
cctccaaaac aacccaatgt tcaggatttc cagttctttc ctccacgttt atttgaatta 1200
ctggaaaaag aaattctggt ttacagaaaa actattgggt acaaggtacc tcgaaatcct 1260
gagctgccta acgcagcaca ggcacaaaaa gaagaacagc ttaaaattga tgaagctgaa 1320
tcccctaattg atgaagagtt agaggaaaaa gagaagcttc taacacaggg atttaccaat 1380
tggaataaga gagattttta ccagtttatc aaagctaattg agaagtggg tctgtatgat 1440
attgaaaata tagcaagaga agtagaaggc aaaactccag aagaagtcatt tgaatattca 1500
gctgtgtttt gggaaagggt caacgagctc caggacatag agaagattat ggctcagatt 1560
gaaaggggag aggcgagaat tcaaagaaga ataagcatca agaaagcact tgacacaaaag 1620
attggacgggt acaaagcacc ttttcatcag ctgagaatat catatggtac taacaaaagga 1680
aaaaactata ctgaagaaga agatcgtttt ctgatttgta tgcttcacaa acttggattt 1740
gacaaagaaa atgtttatga tgaattgcga cagtgtattc gcaactctcc tcagttcaga 1800
tttgactgggt ttcttaagtc cagaactgca atggagctcc agaggagatg taatacctta 1860
attactttga ttgaaagaga aaacatggaa ctagaagaaa aggagaaggc agagaaaaag 1920
aaacgaggac caaagccttc aacacagaaa cgtaaaatgg atggcgacc tgatggtcga 1980
ggaagaaaaa agaagctgaa actatgaata tgtttttgtt tcataatcac taactttaaa 2040
ccagtagttc ttttaatttac gggctctcat aagatgtact gtacaatgct caattgttat 2100
gtcattttaa gacatcaggt tcactgtgtt actgagctag aaacatagta tgtagtttca 2160
ctttttttaa tgcaacagct gtgctgaaat ttttttatca ttaacacttg aagtaataaa 2220
ataggcttca ttattacta agtgtttcat ttgatttatt tttctattgt agttccattt 2280
gtgaagattg tgactttttg tttattagct ataatttcta cacttgtaag gcttamaaac 2340
aagttaaaaa gaaaattgca aataacattt gtccctttca gtcttcacct agttgtgtaa 2400
ttattttaat tcactttgcc tttgcagaaa tttgggtatt ttctttgtag tgctattgag 2460
```

```
tctcatctgg aaagattata taaattgcat tctccttgct tatgtgggta gaatgggara 2520
agaaggcaag acaaagtata cttaaattct atgcatatct ctgttatgct ttctgttttt 2580
ttagttgat tctgaaatga atatgcccta ttcttttgaa agaatggcct ttagttgta 2640
tagccaaaga catttagtat ttcccggttc cttaagggtat tactgtacca ttttgtaaaa 2700
ggaatattat tattattatt ttttaattatt tggtaaatat tttgtcatat gaccttctga 2760
agcagccaca acttagataa tgtcagaact aagggtgattt tttttttttt aattttgaaa 2820
gcccagccaa aatgaggtgt gaatttgctca tactgttaca ttgaaattgg taacaaaata 2880
tatcccctcc catttggaact tttagggtaa atgaaaattt tattgtattt taaagtagtt 2940
tctaagtgtt agcaagactg actataattc cagtttctgt tttctatgga cagacctgat 3000
aaactggaga ccctaaagca ggaataccca aattatagtg tcaggatttt agctgtacca 3060
gaggccttta tgtgctacac ataatttgta taaaatttta tatgtgcaga ttgggtacat 3120
aaacagttct ccatttttct aagggaatgc aataaatgta gcatcgtgaa taaatataac 3180
ttttataatc cgtaaaaaaa aaaaaaaagt gngangggg 3219
```

<210> 738

<211> 849

<212> DNA

<213> Homo sapiens

<400> 738

```
ggggacggaa ggggccctg ccmraraagg gctggagccg ggccggggcg atgtggagcg 60
cgggccgcgg cggggctgcc tggccggtgc tgttggggct gctgctggcg ctgttagtgc 120
cgggcggtgg tgccgccaag accggtgcgg agctcgtgac ctgcgggtcg gtgctgaagc 180
tgctcaatac gcaccaccgc gtgcggctgc actcgacga catcaaatac ggatccggca 240
gcggccagca atcggtgacc ggcgtagagg cgtcggacga cgccaatagc tactggcggg 300
tccgcggcgg ctcgagggc ggggtgccgc gcgggtcccc ggtgcgtgc gggcaggcgg 360
tgaggctcac gcatgtgctt acgggcaaga acctgcacac gcaccacttc ccgtcgccgc 420
tgtccaacaa ccaggaggtg agtgcctttg gggaaagacgg cgagggcgac gacctggacc 480
tatggacagt gcgctgctct ggacagcact gggagcgtga ggctgctgtg cgcttccagc 540
atgtgggcac ctctgtgttc ctgtcagtca cgggtgagca gtatggaagc cccatccgtg 600
ggcagcatga ggtccacggc atgccacgtg ccaacacgca caatacgtgg aaggccatgg 660
aaggcatctt catcaagcct agtgtggagc cctctgcagg tcacgatgaa ctctgagtgt 720
gtggatggat ggggtgatgg aggggtggcag gtggggcgtc tgcagggcca ctcttggcag 780
agactttggg tttgtagggg tcctcaagtg cctttgtgat taaagaatgt tggctatga 840
aaaaaagtc 849
```

<210> 739

<211> 2069

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2046)

<223> n equals a,t,g, or c

<400> 739

```
gcgcgactg agcctctaaa gcgacttcag ctctgcccc ccaacaccac cgctccgggg 60
gaggggctta atgctgggga agggatgtct taaaagagga gaagctttta attagacgat 120
cgagaaaggc tgagggaatt gctatgaarg ggcgggagct gaagtgtaga ggactccttt 180
agacagcaga aagggaagc cgttgagaag ttcccttcaa actccacctg cctcctctcc 240
```

aattcaaaact ccactccctt ctccaaaagt taaaaggaaa gccaaagttg ccacgctccc 300
ctgttcctac tcaataaata cttcttctac tccgccaccg ggaaaacaga aaaaaaaac 360
taatttcctt cccaatatta ggacttagaa aagctctagg tcccgcaayt tgaattttag 420
cctaggggaa tcaaaaatagt aggagcatta ctcttgtttc ctttttcaa atccccacacc 480
tcacctctcc tgcgacgcca tgtctaccaa catttgtagt ttcaaggaca ggtgcgtgtc 540
catcctgtgt tgcaaatct gtaaacaaagt gctcagctct aggggaatga aggctgtttt 600
gctggctgat actgaaatag accttttctc tacagacatc cctcctacca acgcagtggg 660
cttcactgga agatgctatt tcaccaaagt ctgcaaatgt aaactgaagg acatcgcattg 720
tttaaaatgt gggaaacattg tagkttatca tgtgattgtt ccatgtagtt cctgtcttct 780
ttcctgcaac aacrgacact tctggatgtt tcacagccag gcagtttatg atattaacag 840
actagactcc acaggtgtaa acgtcctact tyggggcaac ttgccagaga tagaagagag 900
tacagatgaa gatgtgtaa atatctcagc agaggagtgt attagataaa tggaattatg 960
atatatatga tatacaaaact tttttctatt taaaaatata ttaatggatc aactttaaaa 1020
ttgttagttg ccagtgatct tttttggaaa aaaaaaatgg ggcaattgtt gatttattta 1080
ttttctgtct ctaattagtt acctcagttt gattgaagcc agtggagtgt tgcttttctt 1140
ctacttctac ttctctctcc ccaccttttt ctgcccagtg taggtgtatt cttaaattca 1200
gacgggaaga ttctttcaca tatcactcag ttacctccca atctggggga gtttttctta 1260
caacttgata ccagatacca ttaattttac attcctgaat aaaggcctag taccacgca 1320
tatttcaacc atgcatatat caagttcaac ygagttttta taggggatta aaaaaacaag 1380
ctgttaggtt tccatgggca ctggttctca taggttctat tgggtgataac tgctttaaca 1440
tgagcaaga gtttgtgaat caggaaatag aataaattaa aattttaa atatagagga 1500
atcctcttga ttgctcagca tgatgttaga taaatgagtt tgtagaaaa tatcagtata 1560
cgctgtttac caatgttatt tatttacatt cttctaaagc cattatggat attgtattat 1620
gagagctaaa cctaaataag ttatcctgtt ccctaggacc ttctctgtaa atagtgaatt 1680
ttagacgagt agtctgtcct aaatcttaaa tagaaaaaaa aactaaagcg atttgcttaa 1740
gccattgtac attataaaga gctgttttgt tttgctttgc tttgctttgt tttgtttttt 1800
taaagctgca ttcagagcca caaaggaata ggaaagtagg gtagtggttg attctggttt 1860
tatgtaactc taaaataaat gtatctcttt aatatctcag ttgtagggat tttgtcaata 1920
ccaaagcaga ctgagttgtg gttttgtaaa taaagttttt tctaaaaatg accattcttc 1980
ctttaatttt ttgttatgcc cacatattgt atgtaaaaat ataaataaat agtacttaaa 2040
gtatanaaaa aaaaaaaaaa aaaaagggtt 2069

<210> 740

<211> 1567

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1532)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1548)

<223> n equals a,t,g, or c

<400> 740

aaaaccgaga ggaagcagga agggcggagt ctctatttg agtttggtggc gcgcgaggcc 60
ctgcagtcgg ggttgcgct tgggtactgg ctgggtccga tgctgggtac gctgcgcgcc 120
atggagggcg aggacgtgga agacgaccag ctgctgcaga agctcagggc cagtcgccgc 180

cgttccaga ggcgcattgca gcggctgata gagaagtaca accagccctt cgaggacacc 240
ccggtgggtgc aaatggccac gctgacctac gagacgccac agggattgag aatttgggggt 300
ggaagactaa taaaggaaaag aaacaaagga gagatccagg actcctccat gaagcccgcg 360
gacaggacag atggctccgt gcaagctgca gcctggggtc ctgagcttcc ctcgcaccgc 420
acagtcctgg gagccgattc aaaaagcggg gaggtcgatg ccacgtcaga ccaggaagag 480
tcagttgctt gggccttagc acctgcagtg cctcaaagcc ctttgaaaaa tgaattaaga 540
aggaaatact tgacccaagt ggatatactg ctacaagggtg cagagtattt tgagtgtgca 600
ggtaacagag ctggaaggga tgtacgtgtg actccgctgc cttcactggc ctcacctgcc 660
gtgcctgccc ccggatactg cagtcgtatc tccggaaaaga gtccctgggtga cccagcgaaa 720
ccagcttcat ctcccagaga atgggatacct ttgcatcctt cctccacaga catggcctta 780
gtacctagaa atgacagcct ctccctacaa gagaccagta gcagcagctt ctttaagcagc 840
cagccctttg aagatgatga catttgcaat gtgacctca gtgacctgta cgcagggatg 900
ctgcactcca tgagccgggt gttgagcaca aagccatcaa gcatcatctc caccaaaacg 960
ttsatcatgc aaaactggaa ctccaggagg aggcmcrgat ataagagcrg gatgaacaaa 1020
acatattgca aaggagccag acgttctcag agggagctcca aggagaactt cataccctgc 1080
tctgagcctg tgaaagggac aggggcatta agagattgca agaactgatt agatgtttct 1140
tgccgtaaga cagggtttaaa attggaaaaa gcttttcttg aagtcaacag accccaaatc 1200
cataagttag atccaagttg gaaggagcgc aaagtgcac cctcgaagta ttcttccttg 1260
atttacttcg actccagtgc aacatataat cttgatgagg aaaatagatt taggacatta 1320
aaatggttaa tttctcctgt aaaaatagtt tccagaccaa caatacgaca gggccatgga 1380
gagaaccgtc agagggagat tgaaatccga tttgatcagc ttcacggga atattgcctg 1440
agtccagga accagcctcg ccggatgtgc ctccggact cctgggcat gaacatgtac 1500
agaggggggtc ctgcgaagtc ctggtggcct tnaaggctta aaacccgnaa gctgagttaa 1560
ctttcag 1567

<210> 741

<211> 2829

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (74)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1523)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1728)

<223> n equals a,t,g, or c

<400> 741

gacgtgggg gcagaccaca tgtcagcagt ggggtgctgct tagtaatata ttgtgggtca 60
ttgttatttt ctnttttttg tttacttgta tttcctaaat ttttctacaa tgaacttgta 120
ttaataagaa aaaaccataa aatttactgt ttttaaaaag ctgctctaag taatcagaca 180
gtcaaaaagag caggaatcag ctctccagga ggctcttttg tctggggccg aggggatgag 240
gggtgggtcct gaagacgtct gagtccttg ttacaggagg gtgttcattg tgcctcctc 300

acagctggga gaacagctga agcagctggt gcctgcaagc ggccctcacag tcatggatct 360
ggaagctgag ggcacgtgtt tgcgggttcag ccctttgatg accgcagcag ttttaggaac 420
tcggggagag gatgtggatc agctcgtagc ctgcatagaa agcaaactgc cagtgcgtgtg 480
ctgtacgctc cagttgcgtg aagagttcaa gcaggaagtg gaagcaacag caggtctcct 540
atatgttgat gaccctaact ggtctggaat aggggttgtc aggtatgaac atgctaata 600
tgataagagc agtttgaaat cagatcccga aggggaaaac atccatgctg gactcctgaa 660
gaagttaa at gaactggaat ctgacctaac ctttaaaata ggccctgagt ataagagcat 720
gaagagctgc ctttatgtcg gcatggcgag cgacaacgct gatgctgctg agctcgtgga 780
gaccattgcg gccacagccc gggagataga ggagaactcg aggccttctg aaaacatgac 840
agaagtgggt cggaaaggca ttcaggaagc tcaagtggag ctgcagaagg caagtgaaga 900
acggcttctg gaagaggggg tgttgccgca gatccctgta gtgggctccg tgctgaattg 960
gttttctccg gtccaggctt tacagaaggg aagaactttt aacttgacag caggctctct 1020
ggagtccaca gaacctatat atgtctacaa agcacaaggc gcaggagtca cgctgcctcc 1080
aacgcctcgg ggcagtcgca ccaagcagag gcttccaggc cagaagcctt ttaaaaggctc 1140
cctgcgaggt tcagatgctt tgagtgcgac cagctcagtc agtcacattg aagacttaga 1200
aaaggtggag cgcctatcca gtgggcccga gcagatcacc ctgcaggcca gcagcactga 1260
gggacaccca ggggctccca gccctcagca caccgaccag accgaggcct tccagaaagg 1320
ggtcccacac ccagaagatg accactcaca ggtagaaggc ccggagagct taagatgaga 1380
ctcattgtgt ggtttgagac tgtactgagt attgtttcag ggaagatgaa gttctattgg 1440
aatgtgaac tgtgccacat actaatataa attactgttg tttgtgcttc actgggattt 1500
tggcacaaat atgtgcctga aangtaggct ttctaggagg ggagtcagct tgtctaactt 1560
catgtacatg tagaaccaca tgtttgctgt cctactacga cttttcccta agttaccata 1620
aacacatttt attcacaaaa aacacttcga atttcaagt tctaccagta gcacccttgc 1680
tctttctaaa cataagccta agtatatgag gttgcccggt gcaacttntt tggtaaaaca 1740
gcttttctatt agcactctcc aggttctctg caacacttca cagaggcgag actgggtgta 1800
tcctttgctg tcggtcttta gtacgatcaa gttgcaatat acagtgggac tgctagactt 1860
gaaggagagc agtgattgtg ggattgtaaa taagagcatc agaagccctc cccagctact 1920
gctcttcgtg gagacttagt aaggactgtg tctacttgag ctgtggcaag gctgctgtct 1980
gggactgtcc tctgccacaa ggccatttct cccattatat accgtttgta aagagaaact 2040
gtaaagtctc ctccctgacca tatattttta aatactggca aagcttttaa aattggcaca 2100
caagtacaga ctgtgctcat ttctgtttag tatctgaaaa cctgatagat gctaccctta 2160
agagcttgct cttccgtgtg ctacgtagca cccacctggt taaaatctga aaacaagtac 2220
ccctttgacc tgtctccac tgaagcttct actgccctgg cagctgcctt gggcccaact 2280
cagaaacagg agccagcaga gcactctctc acgctgatcc agccgggcac cctgcttaag 2340
tcagtagaag ctgcgtggca ctgccggtc ctacttttcc gaagtactgc gtcactttgt 2400
cgtaagtaat ggccctgtg ccttctta at ccagcagtca agcttttggg agacctgaaa 2460
atgggaaaa at tcacactggg tttctggact gtagtattgg aagccttagt tatagtatat 2520
taagcctata attatactct gatttgatgg gatttttgac atttacactt gtcaaaatgc 2580
aggggggttt ttttggtgca gatgattaaa cagcttctcc tatttggtgc aatgaagtat 2640
agcagataaa atgggggagg ggtaaattat caccttcaag aaaattacat gtttttata 2700
atatttgga ttgttaaatt ggttttgctg aaacatttca cccttgagat attatttgaa 2760
tggttggttc aataaagggt cttgaaattg ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2820
aaaaaaaaa 2829

<210> 742

<211> 926

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (30)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (460)

<223> n equals a,t,g, or c

<400> 742

```
ggagacctcc tgacctttgg ccctgaagcn accgaggaac cagcccctcg gagttctact 60
tcatgttcca acaagtacga gtcaagcctc aggactttgc tgccattacc atcccacggt 120
ctaggggaga agcccgggtt ggggctggtt tccggcctat gctgccctcc cagggggctc 180
cacagcggcc tctcagcacc ttctcccctg cccccaaggc cacactgac ckaaaactcca 240
taggcagcct cagcaagctc cggccccagc ccctcacctt ctcccctagt tggggtggac 300
caaagagcct gcctgttccc gccccacctg gggaaatggg gaccacgcct tctgctccac 360
cmcaacgcaa tcggaggaaa tctgttcacc gagtgttggc ggaactggat gatgagagt 420
agcctcctga gaacccgcca ccggtcctta tggagcccan gaagaaactc cgtgtagaca 480
aagccccact gactccact ggaaatcgac gtggccgtcc tcggaagtac ccagtgagcg 540
ctcccatggc tccccctgca gttggggcg gggagccctg tgcagctcct tgttgctgcc 600
tgccccagga agagacagtg gcctgggttc agtgtgatgg ctgtgacgtc tggttccatg 660
tggcctgtgk kggtgcagc atccaggctg ccaggaggc cgacttcyka tgcccaggt 720
gccgggctgg cattcagacc taaggtccrc ygccaaggca ccacggaca cacctgccc 780
tgagtagaca cagcagcgag caaataggct tgataaatam ccccttccc ttccctccc 840
aagaggaatg actacaggga agaaggatgg attgatgtgg actcattcag gccttgagca 900
gaccctggtg gccaagacag aagaga 926
```

<210> 743

<211> 1017

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (599)

<223> n equals a,t,g, or c

<400> 743

```
aggggctgca gctgccaaac ccaataccct ctatttaacc cctactctgt tttacaagag 60
aaataaaaaga agtatcagca gagctcaggt gctaacacct gttgagggt gacctacaaa 120
actctgccta caaaactctc ttagacaggt gaatatgcc a tagaagtta ggttgctggt 180
agacctgggg gtccctgcgg gaggtgatg gtttctttac caccacacag gagatttcag 240
tggcaaggca tgcctgcagt gggctttggg ccatgcatct tccaagtcca taggtcttca 300
cctgggtggc agtgagaaaa agtagaaagt aatgagcctc ctgtgtctct ggaaggttct 360
agggwtagg tagagggaag aagagaacaa acaagcctgg cttgtgctga agtgtggtag 420
gcactaccct gtttgcgtga agagaaaaca aagcacctgt tagtagggag gctttagggg 480
gaagccccgt cttgggggca tttctgggca gattgtgaat tggaggaatc tctttaactg 540
aagtactctg gctggacctt gcccttgtgt gaccatgtct cctattgcac cagcatttng 600
aattccatgg ctcaagaggg ttctgggtacc atttattcac agactgtatc ctcgagagag 660
ctgctatata tgggagtgtt ccagccaact ccttttccag tgtctgtaag tcacctcatt 720
aaagtataat tagctgtctc ctctgggaga tcctacccca tcagacaagg gcagtgagcc 780
caagcagtgc cagagggcct cagaaaggga ttagggtaga tgattgcaac tgaacacaa 840
```

tcttctttct ttgccagggt attttggggg ttttgcccca aaatataccc tgggcatagc 900
attactgcag tcttgatgt ctacccaaa ctccacacc atccttcgac ccacagctgc 960
acctttatct atttatcttg ctccagcctg ggggacagag tgagacttcg tctcggg 1017

<210> 744

<211> 361

<212> DNA

<213> Homo sapiens

<400> 744

ggtagccgct ggagtttgtg tggccgccgc cgcgggaacg cgagcccggt aatttttcaa 60
cggagaaagg cgaggctttc gggctctgca gactgagagt tagcaagtgt ccggctccag 120
ccggcatgga ggatccacag agtaaagagc ctgccggcga ggcgtggct ctccgctgc 180
tgagtcgcc gcggccggag ggcggggagg agccgccgcg tcccagtcgc gaggaaactc 240
aacagtgtaa atttgatggc caggagacaa aaggatccaa gtccattacc tccagtgcga 300
gtgacttcag tgaccgggtt tacaagaga ttgccattac gaatggctgt attaatagaa 360
t 361

<210> 745

<211> 1936

<212> DNA

<213> Homo sapiens

<400> 745

gggtttttac cccttctaaa ataagtttta ttccatctgc aaattgctgc aatattatag 60
taatcagaaa ctacataagg aatgttatat aggttgttca gttcccatct ttcttgacaa 120
caataaatac cactttttaa aatgacacat atttaaacc ttagaaaata aagttaacc 180
ttactgaagt gctagtacta aactgtgcta gtactaaaag aaaacagggt ggaacataca 240
tatagcctag catctataac agaattgttg aacgysygya aatgattttt tttttttttt 300
gcaaaggaaa aaattgatac tggaaaagat tgtgtgcat agttattagt catctgtaac 360
cttgcttaag tatttcttag tccaacatag atattttctt tctcctgacc atgtatttta 420
aaatatagtc tatttcttga ctttgaactt aaagctttta tcataawttc tcatgtatac 480
atcgttcttc tgatggtaag ctggatttga aggtagtggg ttcagtgttt cttaggttgg 540
tagctgaggg tatcaggcat cagttcatgc aataatacaa gaaaaaaat cctttgcttg 600
ccaagaggta gactgatgtg catctatctg tttctgttgc tgtaagtcta gaccttcaa 660
ccatttgtaa actaaccctt gggaaatttg aaattacctg ataacttaag actctgtgat 720
ctctggaatc accatatgtt tcttttttgt gtatataatc ataacattac tctttgacta 780
tagtgtgcac tctgaaatgt actcagtga aatttggttt gagtttcatt aatgctattt 840
caccagttag acataattac tctaccgat gtgaatgata cggatgccgg cagagcttcc 900
agatctttca gactcaactg ctaggatcaat tagtttgtca taataaaact tggcagattc 960
tacaagtcta ttatgacaaa ccaggaacta attctataat ggaaaactat ccattctgaa 1020
taataggtat gtaattatct gctgctgctg ctgtgctctg taaattctga atatgacatt 1080
taaaactctg gcctactaaa ggtatcttct ggagtttttg ggaggagaga aactggaaaa 1140
ttaaattgta tttttgccag aagactctta ctgtcatgtg tctcagggtc ttcagttttt 1200
ctataagttt ccataatccaa agttcagaat tcatgtgaaa tacttctttg gggcaaaagt 1260
ccttcattcc tggatattat tggattggaa atctgtagca agatgctgtt taaaattacc 1320
atattgtttt tttatcttat acttagctct ctggctattg aacttccttt tcttggttga 1380
agttagcttc aaatttgctc ctatgctaaa ttacctgtaa atattctgga taggaactac 1440
ttgaaatagt aatttggtta aagatatgac aaaatgaaaa tgcttaaaact acagaaattt 1500
aaaaatgcca taacaatctt gcgagactaa ctttaaaata tacttttaat gattattatg 1560
attttggttg taacgatccc ccacacacaa ccactatgaa gaaataatgc cgcatttttc 1620

ccccattgta ccaaaaagat aaaaaaatgg taaacactga tcaaggtatt ttgtattgtc 1680
aaggcatgca tattctaaag aattaaatgc taacttaaca gcactggctt tctggctggt 1740
caactatatg aaaccttggt cattcctccg agtactgtaa tggtcacact tgtacaatct 1800
tccctgtcat gactttaagt tctacttttc attaaccatg gcctgatatt agttcttaga 1860
gcttcttggt gcaaaaataa aatgatttaa ttctgaaaaa aaaaaaaaaa aaaaaaaaaa 1920
ctcgagacta gttctc 1936

<210> 746

<211> 1619

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1565)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1567)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1568)

<223> n equals a,t,g, or c

<400> 746

ggcggaggag agccgtgcgc acggcgatat tggggccgtg tgcagaccgc cgtgtggcgc 60
aggcaaggac cctcaaaata aacagcctct accttgcgag ccgtcttccc caggcctgcg 120
tccgagtctc cgccgctgcg ggcccgctcc gacgcggaag atctgactgc agccatgagc 180
agcaatgagt gcttcaagt tggacgatct ggccactggg cccgggaatg tcctactggt 240
ggaggccgtg gtcgtggaat gagaagccgt ggcagagggt tccagtttgt ttccctcgtct 300
cttccagata tttgttatcg ctgtggtgag tctggtcatc ttgccaaagg ttgtgatctt 360
caggaggatg gcctgctata actgcggtag aggtggccac attgccaagg actgcaagg 420
gcccaagaga gagcgagagc aatgctgcta caactgtggc aaaccaggcc atctggctcg 480
tgactgcgac catgcagatg agcagaaatg ctattcttgt ggagaattcg gacacattca 540
aaaagactgc accaaagtga agtgctatag gtgtggtgaa actggtcatg tagccatcaa 600
ctgcagcaag acaagtgaag tcaactgtta ccgctgtggc gagtcagggc accttgcacg 660
ggaatgcaca attgaggcta cagcctaatt attttccttt gtcgcccctc ctttttctga 720
ttgatgggtg tattatattt tctgaatcct cttcactggc caaagggttg cagatagagg 780
caactcccag gccagtgagc ttactttgcc gtgtaaaagg aggaaagggg tggaaaaaaa 840
ccgactttct gcatttaact acaaaaaaag tttatgttta gtttggtaga ggtgttatgt 900
ataatgcttt gttaaagaac cccctttccg tgccactggt gaatagggat tgatgaatgg 960
gaagagttag gtcagaccag taagcccgtc ctgggttcct tgaacatggt cccatgtagg 1020
aggtaaaacc aattctggaa gtgtctatga acttcataa ataactttaa ttttagtata 1080
atgatggtct tggattgtct gacctcagta gctattaaat aacatcaagt aacatctgta 1140
tcaggcccta catagaacat acagttgagt gggagtaaac aaaaagataa acatgcgtgt 1200
taatggctgt tcgagagaaa tcggaataaa agcctaaaca ggaacaactt catcacagt 1260
ttgatgttgg acacatagat ggtgatggca aaggtttaga acacattatt ttcaaagact 1320
aaatctaaaa cccagagtaa acatcaatgc tcagagttag cataatttgg agctattcag 1380

```

gaattgcaga gaaatgcatt ttcacagaaa tcaagatggt atttttgtat actatatcac 1440
ttagacaact gtgtttcatt tgctgtaatc agttttttaa agtcagatgg aaagagcaac 1500
tgaagtccta gaaaatagaa atgtaatttt aaactattcc aataaagctg gaggaggaag 1560
ggganannaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagg 1619

```

```

<210> 747
<211> 492
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (476)
<223> n equals a,t,g, or c

```

```

<220>
<221> misc feature
<222> (491)
<223> n equals a,t,g, or c

```

```

<400> 747
aattcggcac sgcgcaggag gacggagccc taaccgcaac ccgcgccgcg ccgngccgat 60
ttgatttgta tccactgtca ccagcactgc tcacttagga ctttctggat ccggacccag 120
gcagcgcaca ctggactctt gaggaagaag gagactctaa ttttgattc cttggtggag 180
gaaaataaaa cactctggtc ttgccgcaa cgatgcaagt gtgactgctg gcgtcttcat 240
gagctccaga ggctacagca cgctaccaag gactctcatg gccctcggga tgatttccga 300
gggagacata ggaggcattg ctcaaatac ctcctctcta ttcctgggca gaggcagtgt 360
ggcctccaat cggcacctyc tccaggctcg tgggcatcac ctgcattgtt aatgstacca 420
ttgagatccc taatttcaac tggccccaat ttgagtatgt taaagtgcct tggtgnacat 480
gccccattgg nt 492

```

```

<210> 748
<211> 603
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc feature
<222> (598)
<223> n equals a,t,g, or c

```

```

<400> 748
cccgcgccca cccggcagta gttgcggagg tcagccccgc ctacttcctc tttccctcgg 60
agcggggcgg ggcgttggcg gcttgtgcag caatggccaa gatcaaggct cgagatcttc 120
gcgggaagaa gaaggaggag ctgctgaaac agctggacga cctgaagggt gagctgtccc 180
agctgcgcgt cgccaaagtg acaggcgggt cggcctccaa gctctctaag atccgagtcg 240

```

tccggaaatc cattgcccgt gttctcacag ttattaacca gactcagaaa gaaaacctca 300
ggaaattcta caagggcaag aagtacaagc ccctggacct gcggcctaag aagacacgtg 360
ccatgcgccg ccggctcaac aagcacgagg agaacctgaa gaccaagaag cagcagcgga 420
aggagcggct gtacccgctg cggaagtacg cgggtcaaggc ctgaggggag cattgtcaat 480
aaagcacagc tggctgagaa aaaaaaaaaa aaaagggggg gccctttaag agggatccct 540
tcgaaggggc ccaaagctta mcggtkgcat tscgaacgtc aataggttct cttccctnat 600
tag 603

<210> 749

<211> 2045

<212> DNA

<213> Homo sapiens

<400> 749

ggcacgagga ggacgtgggg cttccgtgaa tgcgcagtgg gtgcgtcggc caccaccttt 60
tgccaggtt agggaggggg cgacgctgag atgggggcgg cggcggcgga agcggatcgc 120
actctctttg tgggcaacct tgaaacgaaa gtgaccgagg agctcctttt cgagcttttc 180
caccaggctg ggccagtaat aaaggtgaaa attccaaaag ataaggatgg taaaccaaag 240
cagtttgctg ttgtgaattt caaacatgaa gtgtctgttc cttatgcaat gaatctactt 300
aatggaatca aactttatgg aaggcctatc aaaattcaat ttagatcagg aagtagtcat 360
gccccacaag atgtcagttt gtcatatccc caacatcatg ttggaattc aagccctacc 420
tccacatctc ctacgcgagg tacgaaagga ctatggataa catgacttca tcagcacaga 480
taattcagag atctttctct tctccagaaa attttcagag acaagcagtg atgaacagtg 540
ctttgagaca aatgtcatat ggtggaaaat ttggttcttc acctctggat caatcaggat 600
tttcaccatc agttcaatca cacagtcata gtttcaatca gtcttcaagc tcccagtggc 660
gccaaggtac accatcatca cagcgtaaaag tcagaatgaa ttcttatccc tacctagcag 720
atagacatta tagccgggaa cagcgttaca ctgatcatgg gtctgaccat cattacagag 780
gaaagagaga tgatttcttc tatgaagaca ggaatcatga tgactggagc catgactatg 840
ataacagaag agacagtagt agagatggaa aatggcgctc atctcgacac taacacatgt 900
taaaaggaca ttgtttttat agggtcattt taggcccttt gactaagttg atatggaaat 960
attttgttga aaaactgtac agagcagctt tacaagttgt cacatttctt tataaatttt 1020
tttaaagcta cagtttaata caaaatgaat tgcggtttta ttacattaat aacctttcac 1080
ctcagggttt tatgaagagg aaagggtttt atgcmaaaga aagtgttaca attcctaata 1140
attttagaca ctttaggagg ggggtgaagt gtatgataaa gcagatattt taattatttg 1200
ttatcttttt gtattgcaag aaatttcttg ctagtgaatc aagaaaacmt ccagggtgac 1260
agtctaaaat ggctmctggg attttagtta attcaaaaat gaaacttttc agtgattcac 1320
tttactaaca ttctatttgr gaagscwtat tggtaaagt ttggggataaa ggcattgctt 1380
aacttcttat ataatttagg tataaattct gtgacatgct cttgagcttt accctagttg 1440
aacatacatg tgtagattta cacatactgt ttcattctaa aatttagaaa ttgttcatta 1500
aatcccatth gaggtataag tcactcagga agttaaata tctctacacg tatattttta 1560
cattaaaaat acagtgttag cataaatccc cttttcagga agaacaaaaa tgtcagtgca 1620
tagttagata aaatggtaaa atgttttact gaaagcatat ttttttgga aatagattca 1680
tgaagccttt aagtgtgct tctgtcagtc aaacgttaaa aactttaaca ttttcaaagt 1740
gccagactg tgtacaaaag cacatgtaat ggagattgta cagggtgttt tttgtttga 1800
acctttgaaa gagtttaatc ttaacgtttt ctaattttta aatttttaaa tcttgtttaa 1860
caaaagcttg tattaagata ctgttttcat ttcattacag aattgtttat aaaagttcat 1920
ttgttgaaaa ataaggatcc tttttaatac cacagcattt gtactgttcc tttttaatat 1980
actgaaaata taaaagggaag ggkggtgtgtt aaaaaraaaa aaaaaaaaaa aaaaaaaaaa 2040
aaaaa 2045

<210> 750

<211> 1144
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1117)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1121)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1127)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1130)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1137)
<223> n equals a,t,g, or c

<400> 750
ctcaagtctt ccactgcaga tacattggag gcttcaccca cgttttcttt cccttttagtt 60
tgtttgctgt ctggatggcc aatgagcctg tctccttttc tgtggccaat ctgaaggcct 120
tcggttggaag tgttgtttac agtaatcctt accaagataa catactgtcc tccagaatac 180
caagtattag gtgacactag ctcaagctgt tgtcttcaga gcagttacca agaagctcgg 240
tgcacagggt ttctctgggt cttacaggaa ccacctactc tttcagtttt ctggcccagg 300
agtggggtaa atcctttagt tagtgcattt gaacttgata cctgtgcatt cagttctgtg 360
aatactgcc tttttggcgg ggtttcctca tctccccagc ctgaactgct caactctaaa 420
cccaaattag tgtcagccga aagkagggtt caagatagtc ctgtcagtat ttgtggtgac 480
cttcagatta gacagtcttc atttccagcc agtggagtc tggctccaga gccatctctg 540
agactcgtac tactggatgt tttaatatca gatcattacc caccatattg ctcccacagg 600
ccaagggaaa acagacacca gaactgggt tgagggcact accagactga catggccagt 660
acagaggaga actagggag gaatgatgt ttgcacctta ttgaaaagaa aattttaagt 720
gcatacataa tagttaagag cttttattgt gacaggagaa cttttttcca tatgcgtgca 780
tactctctgt aattccagtg taaaatattg tacttgact agctttttta aacaaatatt 840
aaaaaatgga agaattcata ttctattttc taatcgtggt gtgtctattt gtaggataca 900
ctcgagtctg tttattgaat tttatgggtc ctttctttga tgggtcttgc aggttttcta 960
ggtagaaatt atttcattat tataataaaa caatgtttga ttcaaaattt gaacaaaatt 1020
gttttaataa aattgtctgt ataccagtac aagtttattg tttcagtata ctcgactaa 1080
taaaataaca gtgccaattg caaaaaaaaa aaaaaanaaa ngccccncgn ggggggnccg 1140
gaac 1144

<210> 751
<211> 1598
<212> DNA
<213> Homo sapiens

<400> 751
aattccccggg tccacccacg acgtccgggt acggccgaaa agatggcggg cttggcacct 60
ctaattgctc tcgtgtattc ggtgccgcga ctttcacgat ggctcgccca accttactac 120
cttctgtcgg ccctgctctc tgctgccttc ctactcgtga ggaaactgcc gccgctctgc 180
cacggtctgc ccacccaacg cgaagacggg aaccgcgtgt actttgactg gagagaagtg 240
gagatccctga tgttttctcag tgccattgtg atgatgaaga accgcagatc catgttcctg 300
atgacgtgca aacccccctt atatatgggc cctgagtata tcaagtactt caatgataaa 360
accattgatg aggaactaga acgggacaag agggtcactt ggattgtgga gttctttgcc 420
aattggctca atgactgccca atcatttgcc cctatctatg ctgacctctc ccttaaatac 480
aactgtacag ggctaaattt tgggaagggt gatgttgac gctatactga tgtagtacg 540
cgttacaagg tgagcacatc acccctcacc aagcaactcc ctacctgat cctgttccaa 600
ggtggcaagg aggcaatgcg gcggccacag attgacaaga aaggacgggc tgtctcatgg 660
accttctctg aggagaatgt gatccgagaa tttaacttaa atgagctata ccagcgggcc 720
aagaaactat caaaggctgg agacaatatc cctgaggagc agcctgtggc ttcaaccccc 780
accacagtgt cagatgggga aaacaagaag gataaataag atcctcactt tggcagtgt 840
tcctctcctg tcaattccag gctctttcca taaccacaag cctgaggctg cagcctttta 900
tttatgtttt ccctttggct gtgactgggt ggggcagcat gcagcttctg attttaaaga 960
ggcatctagg gaattgtcag gcaccctaca ggaaggcctg ccatgctgtg gccaaactgtt 1020
tacttgagc aagaaagaga tctcatagga cggaggggga aatggtttcc ctccaagctt 1080
gggtyagtgt gttaactgct tatcagctat tcagacatct ccatggtttc tccatgaaac 1140
tctgtggttt catcattcct tcttagttga cctgcacagc ttggtttagac ctagatttaa 1200
ccctaaggta agatgctggg gtatagaacg ctaagaattt tcccccaagg actcttgctt 1260
ccttaagccc ttctggcttc gtttatggtc ttcattaaaa gtataagcct aactttgtcg 1320
ctagtcctaa ggagaaacct ttaaccacaa agtttttattc attgaagaca atattgaaca 1380
accccttatt ttgtggggat tgagaagggg tgaatagagg cttgagactt tcctttgtgt 1440
ggtaggactt ggaggagaaa tcccctggac tttcactaac cctctgacat actccccaca 1500
cccagttgat ggctttccgt aataaaaaaga ttgggatttc cttttgaaaa aaaaaaaaaa 1560
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaag 1598

<210> 752
<211> 1485
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1382)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (1429)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1436)

<223> n equals a,t,g, or c

<400> 752

```
ctttcccagag cctctctccc tggccaggcc ccaggctctcg cagccaggga tggagatggg 60
gggagggggga acctagagtt ctttgtagtg cctccctcag actctaacac actcagcctg 120
gccccctcct cctattgcaa cccccctccc cgctcctccc ggccaggcca gctcagtcct 180
cccagcccc attccacgtg gaccagccag ggcgggggta gggaaagagg acaggaagag 240
cagagccag ttctgggagg cgggggggaag gaggttggtg gcgactccct cgctcgccct 300
cactgccggc ggtcccaact ccaggcacca tggtcccgcc gggccccccc agccacagcc 360
tcctccggct cccccgtgct cagttgctgc tactgggtgt gcaggccgtg gggagggggc 420
tggggccgcgc cagccccgcc gggggccccc tggaagatgt ggtcatcgag aggtaccaca 480
tccccagggc cgtgtccccg gaagtgcaga tgggggattt tgtgcgtac cactacaacg 540
gcacttttga agatggcaag aagtttgatt caagctatga tcgcaacacc ttggtggcca 600
tcgtgggtggg tgtggggcgc ctcactactg gcatggaccg aggcctcatg ggcatgtgtg 660
tcaacgagcg gcgacgcctc attgtgcctc cccacctggg ctatgggagc atcggcctgg 720
cggggctcat tccaccggat gccaccctct acttcgatgt ggttctgctg gatgtgtgga 780
acaaggaaga caccgtgcag gtgagcacat tgctgcgccc gccccactgc ccccgcatgg 840
tccaggacgg cgactttgtc cgctaccact acaatggcac cctgctggac ggcacctcct 900
tcgacaccag ctacagtaag ggcggcactt atgacaccta cgtcggctct ggttggctga 960
tcaagggcat ggaccagggg ctgctgggca tgtgtcctgg agagagaagg aagattatca 1020
tccctccatt cctggcctat ggcgagaaag gctatggtga ggggtgggca ggacacaagg 1080
ggaaattccg cagaagaggg aaaaaccagg cctccacata cagttgctca ggttgtatac 1140
tgcacgaggg catccaacca aggactcaag gtgggatgaa atctaccctt ggtgctacta 1200
agaaggggtg ctttggccgg gcgtgggtggc tcacgcttgt aatcccagca ctttggggaag 1260
ccaagggcgg aggatcacga ggtcaggaga tcgagaccac ggtgaaaccc cgtctctact 1320
aaaaatacaa aaaaattagc ccgggcgtgg tgggggcgcc ttagtccca gctactcgga 1380
anaggcttar gcaggaatat gacgtgaacc cgggaagcgg agcttgcant gagccnaaat 1440
cgggcacttg acttcaacct gggtgacaaa cgagactttt cttaa 1485
```

<210> 753

<211> 1756

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1740)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1756)

<223> n equals a,t,g, or c

<400> 753

```
ttccagccga kacttgagc tgacttccgc aatcccgatg gaataaatct agcaccctg 60
atggtgtgcc cacactttgc tgccgaaacg aagccagaca acagatttcc atcagcagga 120
tgtgggggct caagggtctg ctgctacctg tgggtgagctt tgctctgtac cctgaggaga 180
tactggacac ccactgggag ctatggaaga agaccacag gaagcaatat aacaacaagg 240
tggaatgaaat ctctcggcgt ttaatttggg aaaaaaacct gaagtatat tccatccata 300
accttgaggc ttctcttggg gtccatacat atgaactggc tatgaaccac ctgggggaca 360
tgaccagtga agagggtggt cagaagatga ctggactcaa agtaccctg tctcattccc 420
gcagtaatga caccctttat atcccagaat gggaaggtag agccccagac tctgtcgact 480
atcgaaagaa aggatatgtt actcctgtca aaaatcaggg tcagtgtggt tcctgttggg 540
cttttagctc tgtgggtgcc ctggaggggc aactcaagaa gaaaactggc aaactcttaa 600
atctgagtcc ccagaacctg gtggattgtg tgtctgagaa tgatggctgt ggagggggct 660
acatgaccaa tgccctccaa tatgtgcaga agaaccgggg tattgactct gaagatgcct 720
acccatatgt gggacaggaa gagagttgta tgtacaaccc aacaggcaag gcagctaaat 780
gcagagggta cagagagatc cccgagggga atgagaaagc cctgaagagg gcagtggccc 840
gagtgggacc tgtctctgtg gccattgatg caagcctgac ctccctccag ttttacagca 900
aaggtgtgta ttatgatgaa agctgcaata gcgataatct gaacctgctg gttttggcag 960
tggaatatgg aatccagaag ggaaacaagc actggataat taaaaacagc tggggagaaa 1020
actggggaaa caaaggatat atcctcatgg ctcgaaataa gaacaacgcc tgtggcattg 1080
ccaacctggc cagcttcccc aagatgtgac tccagccagc caaatccatc ctgctcttcc 1140
atctcttcca cgatggtgca gtgtaacgat gcactttgga agggagttgg tgtgctatct 1200
ttgaagcaga tgtggtgata ctgagattgt ctgttcagtt tccccatttg tttgtgcttc 1260
aaatgatcct tcctactttg ctctcttcca cccatgacct ttttactgtg gccatcag 1320
acttccctg acagctgtgt actcttaggc taagagatgt gactacagcc tgcccctgac 1380
tgtgtgtgcc cagggtgtgt gctgtacagg tacaggctgg agattttcac atagggtaga 1440
ttctcattca cgggactagt tagctttaag caccctagag gactagggta atctgacttc 1500
tcacttccta agtcccttc tatatcctca aggtagaaat gtctatgttt tctactccaa 1560
ttcataaatc tattcataag tctttgttac aagtttcat gataaaaaga aatgtgattt 1620
gtcttccctt ctttgcaact ttgaaataaa gtatttatct cctgtctaca gtttaataaa 1680
tagcatctag tacacattca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1740
aaaaaaaaa aaaaaan 1756
```

<210> 754

<211> 1795

<212> DNA

<213> Homo sapiens

<400> 754

```
accacgcgt ccgcccggga ccacgcgtct catccatggc ttccgcggac tcgcgcgggs 60
tggcagatgg cggcgggtgcc gggggcacyt tccagcccta cctagacacc ttgcggcagg 120
agctgcagca gacggaccca acgctgttgt cagtagtggt ggcggttctt gcgggtgctg 180
tgacgctagt yttctggaag ttaatccgga gcagaaggag cagtcagaga gctgttcttc 240
ttgttgccct ttgtgattcc gggaaaacgt tgctctttgt cagggttgta acaggccttt 300
atagagacac tcagacgtcc attactgaca gctgtgctgt atacagagtc aacaataaca 360
ggggcaatag tctgaccttg attgaccttc ccggccatga gagtttgagg cttcagttct 420
tagagcgggt taagtcttca gccagggcta ttgtgtttgt tgtggatagt gcagcattcc 480
agcagagagg gaaagatgtg gctgagtttc tgtatcaagt cctcattgac agtatgggtc 540
tgaagaatac accatcattc ttaatagcct gcaataagca agatattgca atggcaaaat 600
cagcaaaagt aattcaacag cagctggaga aagaactcaa caccctacga gttaccggtt 660
ctgctgcccc cagcacactg gacagttcca gcactgcccc tgctcagctg gggaagaaag 720
gcaaaagatt tgaattctca cagttgcccc tcaaagtgga gttcctggag tgcagtgcca 780
agggtggaag aggggacgtg ggctctgctg acatccagga cttggagaaa tggctggcta 840
```

aaattgcctg agaggcagct ctaaagcaca agacctggat gtgtgacaca cagtttttga 900
aaaaggctctg tggtagtctg gagttgatga ggaaggggta caagatgtgg ttagaaacat 960
ttctttgttc tggaacaaa gtactgttga aaccagcttg gaatTTTTTT tttttttttt 1020
tttaagtica gttctccctt atggctgcct ttcaaacaag taccttttat ctgatgcctg 1080
tatcttccct ttgttaagggt gtaacttgat gtaggggtcaa ggtttttgtg acaacaggca 1140
gactccacac agagaggata tgatgagaat atggccatca cctgaaaagt tttcttatct 1200
tctgtgcttt tggtcctctg aaacaaatcc gcctatgtat gaagctagtt gatttccagt 1260
tgcactattt ccagttgcct ctgaagtcca caggcaatac attgtctagt cctttgcgaa 1320
tttctctgat ttgtgggacac agttatgaag tttccccaca tgtgaagaca ggtacaaaat 1380
agcagagcca agcagacagt gggctctattc ttcattagct cagtgcattg tccacactcg 1440
tcttagcact tacgtttcaa aagcttgcca caaaccttg gagtcattcc cagataatag 1500
aactggaaat gataaatccc ctaatgcca gggcttagtg tggtcttagt ggttatactg 1560
ggaagtgtgt ggagatttag gtgctgctct gctgctctgg atggctgaag gctcctgggc 1620
catcttcatg tgctgcttga agagctccta ttttgactc ctggctagaa tgctgtggaa 1680
caaatacaaa gtgaaaaaag ttctctgtag atttctgaag tgcataattca ttgatgcca 1740
gaaaaaaaa aagttgcctt tttgaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa 1795

<210> 755

<211> 1280

<212> DNA

<213> Homo sapiens

<400> 755

ctggagtggg cacaagcccc tttgcaaagt ctctgggtca ttccagaggg gaggctgacc 60
tttttgattc tggggacatt ttttccacgg gcaactggatc tcagtccgtg gagagaacaa 120
aacccaaggc aaagatagca gagaatcctg ccaaccacc agtgggtggg aaagcaaaga 180
gccccatggt tcctgctcta ggcgaggcca gcagtgatga tgatctcttt cagtctgcta 240
aaccaaaacc agcaaagaaa acaaatccct ttctctctct ggaagatgag gatgacctct 300
ttacagatca gaaagtcaag aagaatgaga caaaatccar tagtcagcag gatgtcatat 360
taacaacaca agatatTTTT gaggatgata tatttgctac ggaagcaatt aaacctctct 420
agaaaaccag agagaaggag aaaacattgg aatctaattt atttgatgat aacattgata 480
tctttgctga cttaactgta aaacaaaaag aaaagtccaa aaagaaagtg gaagccaagt 540
ctatatTTTga tgatgatatg gatgacatct tctcctctgg tatccaggct aagacaacca 600
aaccaaaaag ccgatctgca caggccgcac ctgaaccaag atttgaacac aagggtgtcca 660
acatctttga tgatcccttg aatgcctttg gaggccagta gagcacacag ggtatccaca 720
kgttaccctg cagctacatt gttgagttag tgatgatrrt gtatatgcts atggctctaa 780
ctggattaca aaaagcaaat actagaacag ctagctcatc kttyaccaa tgtacttrgt 840
atttttctgc actggtttaa tcatgcttaa tactacaaaa caaaaataaa tatttcacag 900
tggttggttt gttttgtttt taaaccacag tttgatttag ttagccttgc tggggccata 960
atatgcttca ggggtgtgtaa aagaagaaat ctctttgtgg ctttcatggg cagggaaatcy 1020
cagagatagc aaatgccacc tgaccagaag tctttgttat atggatggga accctaactt 1080
agggcytggg caggggaaaag agaaagaagr tgagagatta tacttcatga gtcttagcaa 1140
tatgggagca ggttttctact gaattctgag ggtgcctctg catgtcctcc aaggcaaaagt 1200
ttggcaaaact gtggccccc cactgtcata ttttgttaat aaaattttat tggaacacaa 1260
mmamaaaaaa aaaaaattac 1280

<210> 756

<211> 3665

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3654)

<223> n equals a,t,g, or c

<400> 756

gaggaggctg ggtgaggcgc tgagacggtt tggcgggtgag tcctggggcca ggcgcactga 60
aaggcccgca acccgggaaa cgtcaaaaaca aacagaagga cttgggattc cggagcagtc 120
gccccatatcg ctgctcctgc agttgcggaac gccaccgacc ccgccgccgg aggactgggc 180
actgaaaggc ctctaggcct aggcgcggcc cgcggagcca gacgtgttgc tgccgtgagt 240
aaaacgagcg cctctccgc actcgtttac aaattaaaat ggaggaaatt tcgttggcca 300
acctggatac taacaagcta gaggccatcg ctcaggagat ttacgtagac ctgatagagg 360
attcttgttt gggattctgc tttgaggtgc accgggcagt caagtgtggc tacttctacc 420
tgaggttcgc agagactggt agcgtgaagg attttggcat tcagccagtg gaagacaaaag 480
gagcgtgccg cctcccgtt tgctcccttc ccggagaacc tgggaatggg cctgatcagc 540
agctccagcg ctcacctccg gaattccagt agctgcaaaa tgagagtctg aaagtggcca 600
ggacaataac atagactggt cctgtggctt cgaggagtaa gctaagtaga aaaaagtaga 660
aaaatcagac aaaagtttta attccccctt gaagatccta gcatttaaaa acccaaagtg 720
gataatttag gaatcctttt tttaaagtgt attacctgga gcaagctctg aagccctggg 780
caggaggagc tgcacagcct gcgggccatg cagtgcctgt tgatctctaa acacaccagg 840
atgtgcgcaa gatcctgtag tgccccagt gcacaggtag gcagttgtgt gccagcata 900
taaaattttt ggttcctcag ctttctgtc tgctgtatgt caagggttc ctggacagtt 960
tggacgttac agttcgtcag gccgtgatca gtggcctgca gtgggactgc tcctttgata 1020
tctgaacctc tgttatgggc ttctctgaga caagtaaatg tcaggtgcaa gatctggata 1080
ctaacagttt cagtttggga aatccaagaa aaagaattat caagtttgat agggaagctc 1140
tgtagccttg actccagcaa gaagaaaagg tcaaaaccac gtgtttccca aaagtccaga 1200
ctacaatgat tcagctgact tgaggacaag gcctagcatt tggctgagca gagccctctt 1260
ccttgccctc caacctgggtg gcataggctt ggcaaatgga caacttgggt gtccagacag 1320
gttgaggatt cggttatgat cccctgggga ggtagcaggg acctctgcaa ctatgcatga 1380
tttctcaaac ttcaagatc atgtctggat gtattatgct gtggatataa gtttagtagg 1440
gcggtcattt cctactctrm gttactgggt acctagccag tccatgggtg tgacttggtc 1500
cttaagtcag gtcactatct gcctcccacc ctgggggcag gactgaagta tagaagagca 1560
tcatggctgt gcaggaggct gtggtttgaa aactgagccc agagggcact ttcagctgcc 1620
ctcaataatg tgaatggatt agtgctagga gccaaaggagc aggactggat tatctcatct 1680
gactgtgtgc agaactctgt tgaatgtccc tgttttcttt gggtgggcag tcagagctct 1740
gctatggtag acatccagac tgtcaccact ttctgtctgc cgctcgaaag ggatagtcct 1800
ttccactcgg tccccttttg atcttcttga caacaggagc agtcctttta ttgttagaag 1860
tcagagaaaag acctccagaa tctcctgact ttagggaatg gtatagggga agatgggaag 1920
taagagtcac atatcaaac taccctccac ttattccct gagcgagggt ttatgaagta 1980
taaaggggtg ggagccccga ggtgagcggg aacggtgctg ctttatttga aatgttttct 2040
tacctcatte tgtgccccag tagggggtcc agcctcatct gtctggcttg gccctgtgtt 2100
cctcctgtcc cctgtccac tgcctatctg gtgccccagg tgctgcttgc cactccagct 2160
gtcacattga acagtttcaa ttcagctctt aatgctcctg cttccgaagc ctgcccatt 2220
tcttttttct tggcctctgt tttttttttt tctttctttt tcccttgttt ttgtagaaga 2280
ctcagaggag aatctttctt atggctccct ctggtgagat tggaattgga agagaactta 2340
attttttgta tttaaaatgc agtgtcatgc ctataagcat ttctcctata taggactgct 2400
ttgctagtgt gccctcttgc tgtgtcttac ttcataagga gttgtatctt cccacctcca 2460
tttcaatact gccggttagg acctaaagtag aagagcagta aaggctgatt gacacacagg 2520
gggatggagt tggccttgt ccattctctc acccttgctg tgcatgtatc aatccttata 2580
ccagaaggta ctatttagac tgtatagact gatttagatt acatacttta gaggattaag 2640
gaaaccatag agtttgggcc ttggaactgt tactgccttg tcctagagtt gtcctgatca 2700

ggcttggggc ctagttacag attagtctta aagaattgca ttaacttaaa aaaaatcaaa 2760
ccttggcaag agctaaaata atttgagat atctttgccc ttgacttgta gacgacatct 2820
aagaggatga agaaaggaga gtctaagtga gactctggcc tacttcctaa caatgtcttg 2880
gaagtgggat gatggtaaa gagaaaggcc acagtccaat ccctctgcct tcagataggg 2940
aactcaaate ctgaaattac tgttttcttt ctggcctttt ctcttggtta gaggaggaag 3000
cggaaagtag ttttgagtaa tactttgttc atattacccc ccttttggtt tttgtttctg 3060
gccccctctac caatagggca gtagcctcct gccctggatg ggtataagggt gggcttggtc 3120
caacaggtkc ccagagggtata catactcctt tctggggaga gaatgctccc taccatatag 3180
ttgacagtgg ttaggaactc tccctttccc tacttacctt ccttttaata gcagaattcc 3240
tatttttccc ttgattatgt gtattgatca ccctgcaatc ctattatgta tctgagtgtg 3300
tgtgtgtgtg tatgtgtgtg ttatggggga aggggggggt tctttaaaat ttctgtggtt 3360
tgtggctttt tcttccatac attagtctcc accatcgcat gcccaggac cactgcctgg 3420
cattatcgca tgcctgggac atcgggggag ggtagtgaag ctcaccactg tcctttggtt 3480
tgagatgttt tatttttgca taagtagtcc atcctataca gatagctgat taactgtatt 3540
cccctttccc ctatggctgc tgggtgtaaa aaactgcac tccccattgg taaacagtaa 3600
taaaatttta aaaaatgaaa aaaaaaaaaa aaaaagaaaa aaaaaagaaa aaanaaaaaa 3660
agaaa 3665

<210> 757

<211> 1221

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1071)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1081)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1201)

<223> n equals a,t,g, or c

<400> 757

gccggcgccc gccgccacg tcgcaggaaa ccccggtggg gacgcggccc ccgcagccac 60
gggcaccgcg gccgccgctt ctttagccac cgccgcgggc agcgaagacg cggagaaaaa 120
agttctcgcc accaaaagtc ttggcactgt caaatgggtc aacgtcagaa atggatatgg 180
atttataaat cgaaatgaca ccaaagaaga tgtatttgta catcagactg ccatcaagaa 240
gaataaccca cggaaatata tgcgcagtgt aggagatgga gaaactgtag agtttgatgt 300
ggttgaagga gagaagggtg cagaagctgc caatgtgact ggcccggatg gagttcctgt 360
ggaaggaggt cgttacgctg cagatcggcg ccgttacaga cgtggctact atggaaggcg 420
ccgtggccct ccccggaatg ctggtgagat tggagagatg aaggatggag tcccagaggg 480
agcacaactt cagggaccgg ttcacgaaa tccaacttac cgcccaagggt accgtagcag 540
gggacctcct cgcccacgac ctgccccagc agttggagag gctgaagata aagaaaatca 600
gcaagccacc agtgggtcaa accagccgtc tgttcgccgt ggataccggc gtccctacaa 660
ttaccggcgt cgcccgcgtc ctcctaacgc tccttcacaa gatggcaaag aggccaaagg 720

```

agggtgaagca ccaactgaga accctgctcc accaaccagc agagcartgc tkartaacac 780
caggytctm aggcacctty accatcggca ggtgacctaa agaattaatg accattcaga 840
aataaagcaa aaagcaggcc acaaccttaa ccaacaccaa agaaacatcc aagcaataaa 900
gtggaagact aaccaagatt tggacattgg aatgtttact gttattcttt aagaaacagc 960
tacaaaaaga aaatgtcaac aaatttttcc agcaagctga gaacctggga attctgcacg 1020
gaagaccaga gagtagcctc ttccgttttc agcaaccgct aggtttccat ntttttttcc 1080
nggtttttac tgttttggtg atatatatat tgaaaccagg aatattaata cccatgggga 1140
gaacccccacc caagaattga atatattggt atgctttttt ccgtttgtca ttggtgctgg 1200
nctgcgattc tgaacccggg a 1221

```

<210> 758

<211> 631

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (630)

<223> n equals a,t,g, or c

<400> 758

```

attagcgct aacgagagac tgcttgctgc ggcagagacg ccagaggtgc agctccagca 60
gcaatggcag tgacggcggt ggcggcgcg acgtggcttg gcgtgtgggg cgtgaggacc 120
atgcaagccc gaggcttcgg ctccgatcag tccgagaatg tcgaccgggg cgcgggctcc 180
atccgggaag ccggtggggc ttccggaaa agagagcagg ctgaagagga acgatatttc 240
cgacattaca ggttatgctt tgagatctct ttgggggtga ggattgaaat taaacctga 300
gccaccgtgt ccttgtagag cacagagtag agaacaactg gcagctttga aaaaacacca 360
tgaagaagaa atcggttcac ataagaagga gattgagcgt ctgcagaaag aaattgagcg 420
ccataagcag aagatcaaaa tgctaaaaca tgatgattaa gtgcacaccg tgtgccatag 480
aatggcacat gtcattgccc acttctgtgt agacatgggt ctggtttaac taatatttgt 540
ctgtgtgcta ctaacagatt ataataaatt gtcatcagtg aaaaaaaaaa aaaaaaaaaa 600
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa c 631

```

<210> 759

<211> 2496

<212> DNA

<213> Homo sapiens

<400> 759

```

ggcaactatt gtaacatccc aaaagctccc cttgtgcctt ttccgggtcat tgtcttttca 60
ggagttgcc aatacctaata tctaacacca tagcttcggt ttgtctgaga ctacgttcct 120
tttaataata ctgaactggt taattcatct gagaattcta cctatgatga aaaatgttgt 180
ggtggtagca tttgggttaa ttctrattat agagtctctt ggagagcaat gtccataaac 240
taatcccaaa caacattgtc tttttrattg tgtagtgaac agcagagaat ttcaaaggac 300
cttgctaata tctgtaagac ggcagctaca gcaggcatca ttggctgggt gtatggggga 360
ataccagctt ttattcatgc taaacaacaa tacattgagc agagccaggc agaaatttat 420
cataaccggt ttgatgctgt gcaatctgca catcgctgtg ccacacgagg cttcattcgt 480
tatggctggc gctgggggtg gagaactgca gtgtttgtga ctatattcaa cacagtgaac 540
actagtctga atgtataacc aaataaagat gccttaagcc attttgaat tgcaggagct 600
gtcacgggaa gtcttttttag gataaacgta ggcctgcgtg gcctgggtggc tgggtggcata 660
attggagcct tgctgggcac tcctgtagga ggcctgctga tggcatttca gaagtactct 720

```

```
ggtgagactg ttcaggaaaag aaaacagaag gatcgaaaag cactccatga gctaaaactg 780
gaagagtgga aaggcagact acaagttact gagcacctcc ctgagaaaat tgaaagtagt 840
ttacaggaag atgaacctga gaatgatgct aagaaaattg aagcactgct aaaccttcct 900
agaaacctt cagtaataga taaacaagac aaggactgaa agtgctctga acttgaaact 960
cactggagag ctgaagggag ctgccatgtc cgatgaatgc caacagacag gccactcttt 1020
ggtcagcctg ctgacaaatt taagtgtggt tacctgtggt ggtagtggct tgctcttgct 1080
ttttctttt ctttttaact aagaatggg ctggtgtact ctactttac ttatccttaa 1140
atttaaatac atacttatgt ttgtattaat ctatcaatat atgcatacat gaatatatcc 1200
acccacctag attttaagca gtaataaaaa catttcgcaa aagattaaag ttgaatttta 1260
cagttcgtat attcatgttg tcctttgaaa gggtagttcta gaaatcactg gaaagaggag 1320
aggaaagaac caggtaggca aatggctctgt gaaaccttg ggtcctggaa gcagtgtgag 1380
tgtaaatgtg tagtgtttg tttcatctaa ataaacaaag atgatttctt tgacacttga 1440
aataaaatac aaattcaaca aaaagtagat cagcattatt aaagaaacgg ttcaactttg 1500
tttcttcct tagtattgct gacaaagtat ctgctgtaga atacaggaat tacttagaat 1560
agaaacatag tcatcacac tggtactaaa tggaaaagaa aagaattatt gagttaagta 1620
ttcctgtcaa tacgggaaac actgctagta ccttatgttg gtgtagacc tytctgccct 1680
acactgagaa tatagtttta cacaggagca aggtttgtga agcagcatag tgaggtagct 1740
aaagccatgg gctggctcta aaggctttaa atcccagcca tgtggcttag ctgccatgag 1800
atgtgcattt gagaaatggt gtcttctttt gctgttcaac tccagatttt cagatgataa 1860
tgtgattatc ccagcttaag ttgcgtccac ttctggtcta gtgaattgtg gaaggcagtt 1920
ttagagaaaag gagtcatgag taacatgaac agcagttggc tatgtctttc cagttctctg 1980
ctgatgtcag aaagaccag aaataccaag gagaaaaagc catcttaggg atctaaggag 2040
gccctatgga aagtactac cttagacatt tgaagatagc ttactgctta gtacatacac 2100
tgtaacaac gatctcattt taaatgagaa ctttctcata aatattttac aaatgaggtc 2160
aaactagcat aaagccattt aaagagatta acagtccaat atgaaccagt taagtctttg 2220
gactatccct ttcctccttg actactgctt tgacgtacct aaatcattca tcttacatgt 2280
cagaggaaat tagttttgga tagttctcct ttctgctgtw cctcatgggg gagtgagaga 2340
gcagcaatag agaacacaat gaaaaaatg gaatactggg taaacaccaa taatatttcc 2400
attagtctcc taaagatgta atgcatagga agtatggcat gaacatcttt aggagactaa 2460
tgatgttcat gccatacttc caatgtaatg catagc 2496
```

<210> 760

<211> 2048

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1957)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1963)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2006)

<223> n equals a,t,g, or c

<400> 760

```
ggcacgagcc cggctgacgt gcccgagaag acgcggtccc tgggaggcag gcagccgagc 60
gacagtgtct ctgacacggt tggccctcgg tgtgccaggc ccgagggagc accctggaca 120
gcctgaggac agccccgagg ctgaggcctc caccctggat gtgttcacgg agaggctgcc 180
gcccagcggg aggatcacca agacagagtc ccttgtcatc ccctccacca ggtccgaggg 240
gaagcaggct gggcgacggg gccggagcac atccttgaag gagcggcagg cagcacggcc 300
ccagaatgag cgggccaaca gcctggacaa cgagcgctgc ccggacgccc ggagccagct 360
acagatcccc aggaagactg tgtatgacca gctcaaccac atcctcatct ccgatgacca 420
gcttcccga aacatcatcc ttgtcaacac ctcgactgg caggggcagt tcctctccga 480
cgtcctgcag aggcacacgc tccccgtggt gtgcacgtgc tctcctgcgg acgtccaggc 540
ggccttcagc accatcgtct cacggataca gagatactgc aactgcaatt cccagcccc 600
gacccccgtg aagatcgccg tggcgggagc gcagcattac ctgagtcca tcctgcggct 660
ctttgtggag cagctgtccc acaagacacc cgactggctc ggctacatgc gcttctggt 720
catccactg ggtcccacc ccgtggccag gtacctaggc tccgtggact accgctacaa 780
caacttcttc casgacctg cctggaraga cctgttcaac aagctggagg cccagartgc 840
ggtacaggac acgccagaca ttgtgtcacg catcacgcag tacatcgag gggccaactg 900
tgcccaccag ctccccatcg cagaggccat gctgacctac aagcagaaga gccctgacga 960
agagtctccc caaaagtcca tcccccttgt cggggttgtg aagggttgaa ttgtggagcc 1020
atcctcggcc acatcaggcg actcggacga cgcggccccc tcgggctctg gcacgctctc 1080
ctccacccc cgtccgcat ctctgcggc caaggaggcc tcacccacc cgcctctctc 1140
cccgtcgggt agcggaggcc tgtcctcccc cagccagggt gtcggcgccg agctgatggg 1200
gctgcagggt gactactgga cggcagcaca gcctgcggac aggaagaggg acgccgagaa 1260
gaaggacctg cctgtcacca aaaacacgct caagtgcact ttccggctcc tccaggctcag 1320
caggctgccc agcagcggcg aggctgcagc cacgcccacc atgtccatga ccgtgggtcac 1380
caaggagaag aacaagaagg tgatgtttct gcccaagaaa gcgaaggaca aggacgtgga 1440
gtctaagagc cagtgcattg agggcatcag ccggctcatc tgcaactgcca ggcagcagca 1500
gaacatgctg cgggtcctca tcgacggcgt ggagtgcagc gacgtcaagt tcttccagct 1560
ggccgcgcag tggctcctgc acgtgaagca cttccccatc tgcatcttcg gacactccaa 1620
ggccaccttc tagccccacc caccaggggg cccacctctc gcccctgct gtgagggggc 1680
cagctgcatt tctgttaaca ttctagttta ctacagagac agacgcttaa aacacaaaga 1740
gaaacagtct taagtatgaa tgtgtcaca acgtggaaac taacggggga gctcctgcca 1800
ggagccgaat aactgctctg cttattaacc cgaacgttcg gcccggggct gggaagccag 1860
aaggacgatg ctgagccatg gatcgcgraa ggcgtcctct ggctcagga gccacccaga 1920
agccttacag gcttgagttc ttgsetctgt gtctgnccy ttnttggaag tcaaggactc 1980
tgctttctta aggagccccg gggaangctg aacttaatgg gcacaggccc gaggggcat 2040
tggggccc 2048
```

<210> 761

<211> 1757

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1728)

<223> n equals a,t,g, or c

<400> 761

```
gtaaagactt tgaaaaagaa atgtacttgt taggaagtag cttaattacc cccattgca 60
gtattattgt tatatatata gttaatatgt tgtacatcac aataatatat aattcagct 120
ctagtttccc tagagtcatt tttgaaacca ctgattgcaa acctccctga caatttttaa 180
```

aagtagtaag ccacattaca tttatctttg taaaaagatt tatggtaact ggtttcttac 240
ttgactttta taaatagtat ttacatctt atttttgcct ttatttcata agtaatttaa 300
aaatcactgg attgctttat tatattcagg gcaatatgga ttatttttat accaaggatt 360
tgcacgtga attacattaa gttatttggc aattttataat ttattactac tttaaataca 420
atgtagcatt atcacactgt atttaaattg tcatttttta aaggaatatt ttcttcttaa 480
gatatataga ggatttttga gaagagagac aggaggggta aaaccagctt aaggttcagc 540
gagcagaaag ggacctgaga ggatgctcac tgtaagactg ttggacagtg gtgtgtattg 600
aggggatgaa tcggaacgat agtctcatgc agaaaatagt gagattaaga tcatccttat 660
tgtttctaaa ttatttcaat cagatgaaag tgatacgatt gaaatgaaat cacatagtgc 720
gtgctcagaa attctatttt ggtatgtttg tatttagcctt tagaaaaaac actccgtttc 780
agaattgttc acagttttat ttcttaggtt ttttagagttc aggatttcat ttattaattt 840
cttcttgctt ttttgggtga aataggcttt gttgtaaaca ttaagaatat aaaatctcct 900
ctatatagaa acaagaattt tgtaaaaag agaatttgaa tcccttccta tactataaaa 960
tgctctatag ggagacaaag tgtttctttt ttcttttatg ttactgttt atgtggagtg 1020
aaatataagg ctcttggtg tataacatac tcaaaagctg ttacactttc tctgatctgc 1080
tgtgatccac tgaatgtg ctgggggttg ttctgtgtgc actgtttatg ctgctggaac 1140
ttagcactgt cttgatttga agcatatgat tgagagccat ttgaagcaat cttcattaat 1200
gcagataaaa caagtttaca tgtgcagagt tagaaaatga catgttcaat tctgtaagtg 1260
gtgacttttt gagcaccttt cagtattatg tatttgtaaa aaccattgtt tttggatata 1320
aagctaataa gcacttttaa aaggaaaagg cagcctttac tattttttct ggttgagtca 1380
ttgctcttta gacctagcat cagcaataga tttcaaagat aagtattaag cgctacccta 1440
aagtgtgtaa gtttttcatt ttgtcatatt gaaaaatgat ttgcatagta ctgaatgttg 1500
acacacagct tatatgtatt tacaagaata tctttaagtg tttttttgac acattaaaaat 1560
aaaggaaata aggaaattgt aagctttatt tggattttta aatacatttt taaaatttca 1620
gatgtaattt aacatcacat ttgtttttca ggtattgagt ttagatgcct actttttatg 1680
aggtaccatc agctgggaca cagtgtcccc gtggcctggt gttttggnag gcaccttttg 1740
gggaaggctg gaggcag 1757

<210> 762

<211> 4448

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (920)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4433)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4446)

<223> n equals a,t,g, or c

<400> 762

```
atngcattaa tatttaaatag tgcttgcttt tcctctgggc acacccattt tgatcattaa 60
ccagagtacc tctactctta gcaaaactcta gtttatgaca aagtatttaa aatattttaa 120
acaagcttat gcagttctta aggacgaagg taaatgagat gtaacttaaa aatagtattg 180
ggaaaatggt gatagttaac attagtggat ttagactagc cawatgacat agtaggctct 240
gaaacatctt ktcaagtata tgtattttgt gcatgaattt ttgctggaaa kctgtctttc 300
tctgawawac acaackttct tagaatgaaa agaacaatta taawataatt atcctatatg 360
tgtttttcat tctttttagt gtcattggctt caaaaatgaa acattttattt taattgccgt 420
aaaggaactg tatttttggt ttgtttttta acacagcact ttaaacyag tttgtgtttt 480
gtcaacttga actggaatct cttttgttac tttggagggt ataaatagtt ttcaaactctg 540
ctgatttgta tactgtggca caagtatctt tgaactttga tagtgaaagg agacctcaa 600
caatttttag tctaggcgag aggaatatta ggaatgtgac ttctaaattt tacaatagag 660
cagttatttt aaggtcatgg ttaacatttc ttaagggtcm actaaaattc agttaaaatt 720
tcagagctac gaggaactta aatccttagct aaaaattacc tgtttagat agtattaatt 780
agattgtttg cagctattta ttcataataa agataaaatg aagaaactct cccttttttt 840
aaacaaaaaa aattatttct agattaatag gctagtagtt atttctgcag aaacaacgta 900
tgggaaactga aagccacctn tttttatttt agactaattt aaaccacttg gaatggattc 960
taggaaacat cttaagcttg tgtgttgctt gtggtggttt tttgtttggg ggtgtttttt 1020
ggttttggtt tgattttctg tattttgtta tctggggatt tttgtttgt ttgttttggt 1080
ttggtttttg ttttatattt ttggcatgtc tatggcagtt aaaagtggta tattttgctt 1140
tagataggga atcaggttat aatcattggt ctctctctaa actgcctctt gggctttaca 1200
tcaggtcaag gatttttagg gtttctcaaa aataggattc ttgtcagtg atgcatgctg 1260
agtaagtcac ctttctggct ctaatttctg ggtggccatc tgtgtccag ctctgctgcc 1320
aactggactt tccgaaagcc atgtcaacta attttttata tgctaagaca aatcgaatat 1380
gaaaagagga agaataattt agatattcta agacatttct taattttggca tctcagagga 1440
ggtaggtgga aagtaaagga agagataatt ttgggggaaa atttgtggaa acatacaaaa 1500
cgttttgctt tgtatagatg ctaaacagag tgggaggcag catatttgta acaacaacca 1560
ttctgacctt ttgaaacaca agcttttgga gaagtcaggg agagacacag tatgaataaa 1620
agcaattaac attttcttta atgtatattt ttcaaagagg accackgaat cctgttctct 1680
aaccgaagg gcaagttagg tggttttaag cccacagaat attgagatat ttctcttggt 1740
gttttggttg ggtggtggga tgcagaaggt tattaagat caatttaagc atcagataga 1800
ctatcccttt tattttttta acttttaggt tcarggttac atgtgcaggt tgttatatag 1860
gtaaaactcat gtcaagtggg tttgtgttac agattatttt gtcaccagg tgctaagcct 1920
agtaccaggt agttattttc cctgctcttc tccctcctcc caccctccac cctcaagtag 1980
gccccagtg ctgttggttc tttctttgtg tccttgagtt ctcatcattt agctcctact 2040
tctaaatgag aacatgtatt tggttttctg ttctgtgtta gtttgctaag gataatggcc 2100
tccagctcag atggaatatc tctatcatat agacctgttg ttacagggca ggatcggatg 2160
atggacactg aagtcctcag cttgctaagt tcagttgctc tccctagcct ccttttggtt 2220
tcagagtctt ttgattccat ctatcctggt attttttggt tgctgatgtt tagttctgga 2280
ttggyttcag ctgtgctaatt aggaaggcgt ttgtcttttc aagcaatctt aaaagggtgt 2340
caatcaaaaag gccagagtct gaatcccttc tgtggcttaa ataatttgag gatcaagtcc 2400
agtgtcttgt taatccctgt tctactgtgc cagacactat cttgaatgct tttatatgtt 2460
caggttcaaa atcgtctctt cataccaggg gatgatagta acgtgtaact tgcaatagat 2520
tccttcatct tagtaataag atgatcagtc tagttaggac aaaatagaga ttgaataaat 2580
taacttttcc aagtttacag agtaaaaatg agcagatctc tgcctggttt tgtgaaaaag 2640
agttagcact ggtaaataga atatttctac tcctacacca ttctttcagt atatcatcac 2700
tgaagacagg aagataggca cacagattct tcctcgtagt aattcatagt gcactagggt 2760
aaagagatga agtatgtatt aaaagtacaa tgtgatggca tttattattc agataatccc 2820
aggattctag aagaaaaataa agaagagtga cagttcagtt aggggtgtgaa cttccagagg 2880
```

agcactgctt aagctgaact tgagagcatt gtgcaaaagc acagtagtct gttaagaact 2940
agaaataacc tagcttgctg cacttcggga gtattaagac ataagcctag aaaggtaggc 3000
aaagggttaga tcttagactg tcttggtattt ttctcattcc tgttgattac ctacctcaaa 3060
attgaatatg tttttcctcc tgcctaacac aaaactacyc aagggcagaa atttaaattc 3120
ttccttggtg tatgtgcaaa gaagggtgaa tatattcatg cctaccttat tttggactag 3180
gaatacagta gtatactttc cgaagacttg cctgaatagt atataagggtg gaggcaactg 3240
actagttagg tcagtatttt tagaaactct taatagctca tactcttgat accaaaagca 3300
gccctgattg ttaaagcaca cacctgcaca agaagcagtg atgggtgcat ttacatttcc 3360
tggtgacaca aaaaaaaatt ctcaaaaagc aaggacttac gctttttgca aagcctttga 3420
gaagttagtg gatcatagga agcttataac aagaatggaa gattcttaaa taactcactt 3480
tctttggtat ccagtaacag tagatgttca aaatatgtag ctgattaata ccagcattgt 3540
gaacgctgta caaccttggtg gttattacta agcaagttac tactagcttc tgaaaagtag 3600
cttcataatt aatgttattt atacactgcc ttccatgact tttactttgc cctaagctaa 3660
tctccaaaat ctgaaatgct actccaatat cagaaaaaaa gggggagggtg gaattatatt 3720
tcctgtgatt ttaagagtac agagaatcat gcacatctct gattagttca tatatgtcta 3780
gtgtgtaata aaagtcaaga tgaactctca agagcctcct acttttgtct tattgtcaga 3840
tatgtgaaag cagtttttag aggttagaaa atggaaattt ccacctttct agtaggatga 3900
gaatagagaa atgttctatt ttttttttcc ctacctgcat ttgcattcat ggatggccag 3960
gattcgttttt ggggtattat tttttattgtt gttttgcatc ctactagcta ttggatctac 4020
tatattgctg ttatcattga gtatgctttg aagagcctta aatgactcca gcagtttgct 4080
ttgggtgtga agtctttaat ttcccagag atgggtgaaa tccgattctg agtgaaagtg 4140
acagttatca attactgagt tattttcaac cttgtcctca actgggagcc ttcagatgcc 4200
caaacattct ggcaagtaac tattattttc tgtctaaaat ctgtttgtga gcatagtcca 4260
tcagtcagat tattcagcca atttatacta ttattagtat ttactgagaa atatgaaaag 4320
gcttttgtct tgctttgagg aatgtggtct tcctgctgtt agcttcccaa aactgaataa 4380
acacagacca acctttgaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ccncgggggg 4440
ggcccngg 4448

<210> 763

<211> 2890

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<400> 763

ggactgaagg accgcggttn agggggcgca ggaacgccaa agaaaagaca agcaccgagg 60
gccgggaagg gtgtaggctg cagtggcagc ggatccccgg ccgccgcttc cggcgcttcc 120
cggcccagct ctcccgcgcc gactctgccca catcctccgg tgacgtcagc cggggccgcc 180
atattgaaaa ggcgccgccg ccgcctccgc cttggagctc ggggtgtttc ggggactgcg 240
gccacaggca ggaaggcgct cctctcctgc ccgcgcgacg cccggccagc ccgcttcgcc 300
ctgacctgtt tcctcatgac tgccccgggc cctgctgccg acggacgtcg ccccgcgctc 360
cggatttaac acggaacccc ggatcggagg ccgcgcgggg aggaggaggg cgaccgggtc 420
ggctctgcga ccctctcggc ccggctcggc gcctcggcgg gagccatgac ctcgctgacc 480
cagcgcagct ccggcctggt gcagcggcgc accgaggcct cccgcaacgc cgccgacaag 540
gagcgggcgg cgggcggcgg cgccggcagc agcgaggacg acgcgcagag ccgccgcgac 600
gagcaggacg acgacgacaa gggcgactcc aaggaaacgc ggctgaccct gatggaggaa 660
gtgctcctgc tgggcctcaa ggaccgcgag ggttacacat cattttggaa tgactgtata 720

tcacatctggat tacgtggctg tatgttaatt gaattagcat tgagaggaag gttacaacta 780
gaggcttctg gaatgagacg taaaagtcta ttaacaagaa aggtaaatctg taagtcagat 840
gctccaacag gggatgttct tcttgatgaa gctctgaagc atgttaagga aactcagcct 900
ccagaaacg tccagaactg gattgaatta cttagtgggtg agacatggaa tccattaaaa 960
ttgcattatc agttaagaaa tgtacgggaa cgattagcta aaaacctggt ggaaaagggt 1020
gtattgacaa cagagaaaca gaacttccta ctttttgaca tgacaacaca tccccctcacc 1080
aataacaaca ttaagcagcg cctcatcaag aaagtacagg aagccgttct tgacaaatgg 1140
gtgaatgacc ctcaccgcat ggacaggcgc ttgctggccc tcatttacct ggctcatgcc 1200
tcggacgtcc tggagaatgc ttttgctcct cttctggacg agcagtatga tttggctacc 1260
aagagagtgc ggcagcttct cgacttagac cctgaagtgg aatgtctgaa ggccaacacc 1320
aatgaggttc tgtgggcggt ggtggcgcg ttcaccaagt aactctgctc ggggtgaacc 1380
attctccttt ctctcaagta aaccagtagt tttctctctg ttgacttctg gtttctctgta 1440
atttgtactt tcccacacta taattggcct ctgttttaca aaatgggtggg tggctttttc 1500
ttttttgtac gtgtacagga ttctgctggt acgagaggcc ttcctctttc tgtttttaaa 1560
aaaagtttta ctgccatatt ggcattccat tccctgttgc catcctcact gttacctgtt 1620
ttgggtttct ggtctacttt gactttcaaa gtacctccag cctcctcata cgcacagctt 1680
ttggatgacc tcagcttgag tttctccata tgtgcatgta catctagcat tctgcctaca 1740
gttcagacag aagtcacaaa aaggccttca actcacaaa ggtaaatac tgatctatt 1800
aggacatttt ttacatagac ttcagttgag atgtatactt agcaaaaatta tttttaaaat 1860
gaaacagcac agtaaaatact taatataaaa tgtcccttgg attttgcttc ccatgtaaat 1920
ctattgtatt attacacttg ttataatttt aactataaag gtccaattgt ttcacagagc 1980
cagtttgagg tgggctgcat tccatttatg ctgtatatag tttgaattat atataaaata 2040
ccccctcttc tggccacccc tgctcccatc ttagtatttt gcaagatcta atcagttgta 2100
cacctggtgc ccctcgcttg cttcaatcat ggttatttga tggcaaaatc gacctcttgt 2160
cgctgaagga gagagaaaag atgtgtgtct gattggctct gggatttttt gagctgtgcc 2220
atztatggta ctctttgcct atgcatcccc ttttttagatt ttttttaaat tttatcttac 2280
tgtttttata atttctattg ggaagaggct tgtgaccagt accaatcttg agtttctttt 2340
tctgtccaca agtaaatata tatctgctct gaaatgtcat ttatctactc acacattctt 2400
ggggaaaaaa atcaaatgtc agtcctagca gatgttgcat gtaaattggg agcaagtaat 2460
gattacaacc cagaggatta agaattttgt aacagaaagc tctatgtttt aattttttat 2520
atacaattag gataattagc attgtcagac tataaacctt tgctttttta agtttatttt 2580
tactatttct ttatcacttt attgtatcat caccattggt ttcataatgt aaatactata 2640
tgttgaacaa attaaatgtc aaaatttttt attaccatag tccatgttaa tagtggggct 2700
ttcaggtgtt tagagatttt tttgtgtgtt gttaacattc attgcaaaaag tactagatgg 2760
tgtataactc tagagttgaa ttttaaggga ttccctaata tgtatactat ctttttatct 2820
gaagtaataa ataaacaatg atcttgaaag tgcctgaaaa aaaaaaaaaa aaaaaaaaaa 2880
aaaagtcgac 2890

<210> 764

<211> 1703

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (368)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (860)

<223> n equals a,t,g, or c

<400> 764

```

cataggttct gtctttgtct cttcctttca cctcattctg gtagcagcat aaaggtagg 60
caatcactgg gacccgcatg gtgttcctcc aaagaatagg gtaaaggaga gctgggaggg 120
agccctctcc gttgggtgac tcttgtgtgc cctttagaca ggctggcctg ccggttccac 180
agggtagagt taggacttga gtctttcttt tctgttttg agttgggtgag tgagtgatag 240
ggtaacatgg gccttcagga tgaccccttg gaactgtgcc gagttcctta aatctcagct 300
gggatcctgg acctgggagg cccctgtgag ggccagctct ggaaaaacct gggagttagt 360
gccggagntg tggaaagaact ctgctcgagg gcagggtgcc ctggaacact ggtagttctg 420
gggctgggag ggagaggggc tccggctttc tctgaaatga acactgctct tcagcagttc 480
aagtacttgt tctcaaaaca ttttctaatt gattggtagg ttttcataag cattgtttct 540
ttaaggcatg gaaagggaag aatgctcaag caagtcagt ttgttttcag tgggatgggc 600
ccgctgtctc actgctgggg gcttcccctt catgtggcac ctttgtgcag gccaccaggc 660
agactcttcc caccttctcc cactgaagca ccaagrggct tgaaccgtaa tttggctaata 720
cagaggcatt tttttgtcc tagtatcttt cacactgttc caaccgtctt atttttttaa 780
aagttctgtt gcttgattta acacgaaact agagagaaat agtttctgaa gccagtttat 840
tgtgaagatc cccaaggggn aggttcggta gagaaaaata gtaagctggg ttagaaactg 900
acgagggcaa acagccagga cgcattggag aggaatttgc caaagatcta ccctgagata 960
acgcctgtcc agtgtcttca ccacgtgaat aaccagcgct ccaaagtgtt tttctgcttt 1020
gaaaaaaaaa attccacaag cttttaaagg tgcatttaag aatccatgtg acttttagaat 1080
ggaactgccg gccctggcaa ctgtcacgtg tgctagaagg ttcgatgcct ctggaatgca 1140
tgtgatactc atctccattt tgtttccttg attgcatttt tgttctttta gcagatctgt 1200
ccctgtgggt ggtgtctaag aagtcggaca ccttggtttt tgtgttagat tgagctgggc 1260
agctgcaatc agcttcttta tatgcaaatt aggcacgacc catctgtggg tcctgggttg 1320
tggctaatag agtgagggga gggagggatg tcaccccaaa agtagggcct cccattggct 1380
ttggccaggc cagacacttc acatcgttta catggttctg tgtaatttta aagtttatgt 1440
gtataaagcg aagctgtttc tgtgaaactg tataattttg aaataaatat attgctactt 1500
tgaggttcat gaaaaaaaaa aaagcgtaat aacgcgaact accgtcatga gaggttatgc 1560
ggcacggtga acacgcggac tatactctgt gaccgtgcga cgcgcgaggt aagggcccct 1620
ctccgcggag ccccccgcac ggtgggcaaa agccccgtct tctcgcgtag aggtttccac 1680
aggcgctgt ggccaagggc gat 1703

```

<210> 765

<211> 262

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (156)

<223> n equals a,t,g, or c

<400> 765

```

ggcagagccc cgccggagtg tcccgcgggtg ggctaggggc agggccggag ccgcggcgcg 60
kagctgtggg tttgaraggt tatattgtcca tgggatgctc gtgttaaaac aaaaatcttc 120
attgcaaagc ttaagtaaaa acaagtctcg accganatcc ttcagtatga gagatttggg 180
gacacttctc tctcctgtgt gtagttgata gtttggtggg gaagagatgg ctgacagtgt 240
caaaaccttt ctccaggacc tt 262

```

<210> 766

<211> 3072

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3072)

<223> n equals a,t,g, or c

<400> 766

```
ttcgactcct tcaggttatc ttgaactgcc tgacttaggc cagccctaca gcagtgtgt 60
ttactcattg gaggaacagt accttggtt ggctcttgac gtggacagaa ytaaaaagga 120
csaagaagag gaagaagacc aagccccacc atgccccagg ctgagcaggg agctgtgtga 180
ggtagtagag cctgaagtct tgcaggactc actggataga tgttattcaa ctccctccag 240
ttgtcttgaa cagcctgact cctgccagcc ctatggaagt tccttttatg cattggagga 300
aaaacatgtt ggcttttctc ttgacgtggg agaaattgaa aagaagggga aggggaagaa 360
aagaagggga agaagatcaa agaaggaag aagaagggga agaaaagaag gggaagaaga 420
tcaaaaccca ccattgcccc ggctcagcag ggagctgtct gatgagaaag ggctgaagt 480
cttgaggagc tcactggata gatgttattc aactccttca ggtgtctctg aactgactga 540
ctcaggccag ccctacagaa gtgcctttta yrtattggag caacagcgtg ttggcttggc 600
tgttgacatg gatgaaattg aaaagtacca agaagtggaa gaagaccaag acctcatgt 660
ccccaggctc agcagggagc tgctggatga gaaagagcct gaagtcttgc aggactcact 720
ggatagatgt tattcgactc cttcaggtta tcttgaactg cctgacttag gccagcccta 780
cagcagtgtc gtttactcat tggaggaaca gtaccttggc ttggctcttg acgtggacag 840
aattaaaaag gaccaagaag aggaagaaga ccaaggccca ccattgcccc ggctcagcag 900
ggagctgtct gaggtagtag agcctgaagt cttgcaggac tcactggata gatgttattc 960
aactccttcc agttgtcttg aacagcctga ctccctgccc ccctatggaa gttcctttta 1020
tgcattggag gaaaaacatg ttggcttttc tcttgacgtg ggagaaattg aaaagaaggg 1080
gaaggggaag aaaagaaggg gaagaagatc aaagaagraa agaagaaggg gaagaaaga 1140
aggggaagaa gatcaaaacc caccatgccc caggctcaac ggctgtctga tggagtgga 1200
agagcctgaa gtcttacagg actcactgga tagatgttat tgcactccgt caatgtactt 1260
tgaactacct gactcattcc agcactacag aagtgtgttt tactcatttg aggaacagca 1320
catcagcttc gcccttkacg tggacaatag gttttttact ttgacggtga caagtctcca 1380
cctggtgttc cagatgggag tcatattccc acaataagca gcccttasta akccgagaga 1440
tgtcattcct gcaggcagga cctataggca mgtgaagatt tgaatgaaas tayagttcca 1500
tttggaagcc cagacatagg atgggtcagt gggcatggct ctattcctat tctcaracca 1560
tgccagtggc aacctgtgct cagtctgaag acaatggacc cacgttaggt gtgacacgtt 1620
cacataactg tgcagcacat gccgggagtg atcagtcrga ctttttaatt tgaaccagct 1680
atctctgggt agctacaaaa ttcctcaggg atttcatttt gcaggcatgt ctctgagctt 1740
ctatacctgc tcaaggtcak tgtcatcttt gtgttttagct catccaaagg tgttaccttg 1800
gtttcaatga acctaacctc attctttgtg tcttcagtgt tggcttgttt tagctgatcc 1860
atctgtaaca caggagggat ccttggtgta ggattgtatt tcagaaccac caactgtctt 1920
tgacaattgt taaccgcgta grctcctttg gttagagaag ccacagtcct tcagcctcca 1980
attggtgtca gtacttagga agaccacagc tagatggaca aacagcattg ggaggcctta 2040
gccctgtccc tctcaattcc atcctgtaga gaacaggagt caggagccgc tggcaggaga 2100
cagcatgtca cccaggactc tgccggtgca gaatatgaac aatgccatgt tcttgagaa 2160
aacgcttagc ctgagtttca taggaggtaa tcaccagaca actgcagaat gtrgarcact 2220
gagcaggaca gctgacctgt ctccctcaca tagtccatrt caccacaaat cacacaacaa 2280
aaaggagaag agatattttg ggttcaaaaa aagtaaaaaa ataatgtagc tgcatttctt 2340
tagttatttt garcccaaaa tatttctcca wctttttgtt gttgtcattg atggtggtga 2400
catggacttg tttatagagg acaggtcagc tgtctggctc artgatctac attctgaagt 2460
```

tgtctgaaaa tgtcttcatg attaaattca gcctaaacgt tttgccggga aactgcaga 2520
gacaatgctg tgagtttcca accttagccc atctgcgggc agagaaggtc tagtttgtcc 2580
atcagcatta tcatgatatc aggactggtt acttggttaa ggaggggtct aggagatctg 2640
tcccttttag agacacctta cttataatga agtatttggg aggggtggtt tcaaaaktag 2700
aaatgtcctg tattccgatg atcatcctgt aaacatttta tcatttatta atcatccctg 2760
cctgtgtcta ttattatatt catatctcta cgctggaaac tttctgcctc aatgtttact 2820
gtgcctttgt ttttgctagt gtgtgttgtt gaaaaaaaa acattctctg cctgagtttt 2880
aatttttgtc caaagttatt ttaatctata caattaaaag cttttgccta tcactctgga 2940
ctgttggtt gttttttaca ttcagtgtta taatmtttgt tatgctgatt ggttttggtg 3000
gggtactgatg tgaattaata aaaacatttc atttccaaaa aaaaaaaaaa aaaaaaaaaa 3060
aaggggggcc cn 3072

<210> 767

<211> 1321

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1321)

<223> n equals a,t,g, or c

<400> 767

gcgcgagcgg aatctcggcg ctcccgaag tggycgaag gcgcgcgcgc agtcccagac 60
agtgtcgtc cctgtcggg gcgctgcggc cccgggcgtc gccatgacca gtgagctgga 120
catcttcgtg gggaacacga cccttatcga cgaggacgtg tatcgccctc ggctcgatgg 180
ttactcgtg accgacgcgg tggccctgcg ggtgcgctcg ggaatcctgg agcagactgg 240
cgccacgcga gcggtgtgc agagcgacac catggacat taccgcacct tcccatgct 300
cgagcggctg ctgcatgcgc cgccaagct actgcaccag ctcatcttcc agattccgcc 360
ctcccggcag gcaactactca tcgagaggta ctatgccttt gatgaggcct ttgttcggga 420
ggtgtctggc aagaagctgt ccaaaggcac caagaaagac ctggatgaca tcagcaccaa 480
aacaggcatc accctcaaga gctgccggag acagtgtgac aactttaaac gggctctcaa 540
ggtggttagag gaaatgcggg gctccctggg ggacaatatt cagcaacact tcctcctctc 600
tgaccggttg gccagggact atgcagccat cgtcttcttt gctaacaacc gctttgagac 660
aggggaagaaa aaactgcagt atctgagctt cggtgacttt gccttctgcg ctgagctcat 720
gatccaaaac tggacccttt ggagccgtcg gtgaaggmcc cattggagcc gtcgactcac 780
agatggatga catggacatg gacttagaca aggaatttct ccaggacttg aaggagctca 840
aggtgctagt ggctgacaag gaccttctgg acctgcacaa gagcctggtg tgcactgctc 900
tccggggaaa gctgggcgtc ttctctgaga tggaagccaa cttcaagaac ctgtcccggtg 960
ggctggtgaa cgtggccgcc aagctgaccc acaataaaga tgtcagagac ctgtttgtgg 1020
acctcgtgga gaagtgtgtg gaaccctgcc gctccgacca ctggccactc agcgacgtgc 1080
ggttcttcct gaatcagtat tcagcgtctg tccactccct cgatggcttc cgacaccagg 1140
cctctgggac cgctacatgg gcaccctccg cggctgcctc ctgcgcctgt atcatgactg 1200
aggtgcctcc caacgctccg cccacgctga caataaagtt gctctgagtt tggaaaaaaa 1260
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1320
n 1321

<210> 768

<211> 1532

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1523)

<223> n equals a,t,g, or c

<400> 768

```
ggtgcattcg tgaaattctg cagcacatcg gcgaaagtga tttaaatcta ccacccagct 60
gtagttgaat ctacaatctg ctcagggatt tatactcaat gccaatTTga tatcatgctg 120
ggagggactg attgcagaac cttcttgaca agccacataa atctaaagaa aacgttTgtg 180
gacgtgatcc tcatggTcca ggaaagaaaag atacctgctc atcgtgtTgt tcttgctgca 240
gccagtcatt tttttaactt aatgttcaca actaacatgc ttgaatcaaa gtcctttgaa 300
gtagaactca aagatgctga acctgatatt attgaacaac tggTggaatt tgcttatact 360
gctagaattt ccgtgaatag saacaatgtt cagtctTtTgt tggatgcagc aaaccaatat 420
cagrttgaac ctgtgaagaa aatgtgtgtt gattttTtTga aagaacaagt tgatgcttca 480
aattgtcttg gtataagtgt gctagcggag tgtctagatt gtcctgaatt gaaagcaact 540
gcagatgact ttattcatca gcactttact gaagtttaca aaactgatga atttcttcaa 600
cttgatgtca agcagtaaac acatcttctc aaccaggaca ctctgactgt gagagcagag 660
gatcaggttt atgatgctgc agtcaggtgg ttgaaatacg atgaacctaa tcgccagcca 720
tttatggTtg atatcctTgc taaagtCagg tttcctctta tatcaaagaa tttcttaagt 780
aaaacggtac aagctgaacc acttattcaa gacaatcctg aatgccttaa gatggtgata 840
agtggaaatga ggtaccatct actgtctcca gaggaccgag aagaacttgt agrtggcaca 900
agacctagaa gaaagaaaca tgactaccgc atagccctat ttggaggctc tcaaccacag 960
tcttgtagat attttaaccc aaaggattat agctggacag acatccgctg cccctttgaa 1020
aaacgagaga tgcagcatgc gtgttttggg acaatgtagt atacattttg ggaggctctc 1080
agcttttccc aataaagcga atggactgct ataatgtagt gaaggatagc tggtatTCga 1140
aactgggtcc tccgacacct cgagacagcc ttgctgcatg tgctgcagaa ggcaaaattt 1200
atacatctgg aggttcagaa gtaggaaact cagctctgta tttatttgag tgctatgata 1260
cgagaactga aagctggcac acaaagccca gcatgctgac ccagcgctgc agccatggga 1320
tggTggaagc caatggccta atctatgttt gtggTggaag tttaggaaac aatgtttctg 1380
ggagagtgtc taattcctgt gaagtttatg atcctgccac agaaacatgg actggctgtg 1440
tccatgattg agccaggagg atcatgggtg gtatttttaa agacagtatt ttgctgtggg 1500
gtggtccaga ttggttttag gtngtcttgg ac 1532
```

<210> 769

<211> 2569

<212> DNA

<213> Homo sapiens

<400> 769

```
gtggccagcg ggcaccctcg gcccgacatc acgtggatga aggacgacca ggccttgacg 60
cgcccagagg ccgtgagacc caggaagaag aagtggacac tgagcctgaa gaacctgcgg 120
ccggaggaca gcggcaaata cacctgccgc gtgtcgaacc gcgcgggcgc catcaacgcc 180
acctacaagg tggatgtgat ccagcggacc cgttccaagc ccgtgctcac aggcacgcac 240
cccgtgaaca cgacggtgga cttcgggggg accacgtcct tccagtgcaa ggtgcgcacg 300
acgtgaagcc ggtgatccag tggtgaagc gcgtggagta cggcgccgag ggccgccaca 360
actccaccat cgatgtgggc ggccagaagt ttgtggtgct gccacgggt gacgtgtggt 420
cgcgcccgga cggctcctac ctcaataagc tgctcatcac ccgtgccgc caggacgatg 480
cgggcatgta catctgcctt ggcgccaaca ccatgggcta cagcttccgc agcgcccttc 540
tcaccgtgct gccagaccca aaaccgcaag ggccacctgt ggcctcctcg tcctcggcca 600
ctagcctgcc gtggcccggt gtcacggga tcccgccgg cgctgtcttc atcctgggca 660
```

ccctgctcct gtggctttgc caggcccaga agargccgtg crccccgcg cctgcccctc 720
ccctgcctgg gcaccgcccc cgggggacgg cckcgcaccg cagcggagac aaggaccttc 780
cctcgttggc cgccctcagc gctggccctg gtgtggggct gtgtgaggag catgggtctc 840
cggcagcccc ccagcactta ctggggccag gcccagttgc tggccctaag ttgtacccca 900
aactctacac agacatccac acacacacac acacacactc tcacacacac tcacacgtgg 960
agggcaaggt ccaccagcac atccactatc agtgctagac ggcaccgtat ctgcagtggg 1020
cacggggggg ccggccagac aggcagactg ggaggatgga ggacggagct gcagacgaag 1080
gcaggggacc catggcgagg aggaatggcc agcaccacag gcagtctgtg tgtgaggcat 1140
agcccctgga cacacacaca cagacacaca cactrcctgg atgcatgtat gcacacacat 1200
gcgcgcacac gtgctccctg aaggcacacg tacgcacaca cgcacatgca cagatatgcc 1260
gctgggcaca cagataagct gcccaawtgc acgcacacgc acagagacwt gccagaacwt 1320
acaaggacwt gctgcctgaa catacacacg cacacccatg cgcagatgtg ctgcctggac 1380
acacacacac acacggatat gctgtctgga cgcacacacg tgcagatatg gtatccggac 1440
acacacgtgc acagatatgc tgccctggaca cacagataat gctgccttga cacacacatg 1500
cacggatatc gcctggacac acacacacac acgygtgcac agatatgtct tctggacacg 1560
cacacacatg cagatatgct gcctggacac acacttccag acacacgtgc acaggcgacg 1620
atatgtctgc tggacacacg cagatatgct gtctwgtcac acacacacgc akacatgtct 1680
tccggacaca cacacgcacg cacagatatg ctgtccggac acacacacgc acgcagatat 1740
gctgcctgga cacacacaca gwtaatgtct cctcaacact cacacacgtg cagatatgtc 1800
ctggacacac acatgtgcac agatatgtct tctggacatg cacacacgtg cagatatgct 1860
gtccggatac acacgcacgc acacatgcag atatgtctgc tgggcacaca cttccggaca 1920
cacatgsrca cacagggtga gatagtctgc ctggacacac gcagactgac gtgcttttgg 1980
gaggggtgtg cgtgaagcct gcagtacgtg tgccgtgagc tcatagtgtg tgagggactt 2040
tcctgtctcc accgtcactc ccccaactct gcccgctct gtmcccgctc yagtccccgs 2100
ctccatcccc gsetctgtcc cctggccttg gcggctatct ttgccacctg ccttgggtgc 2160
ccaggagtcc cctactgtct tgggctgggg ttgggggcac agcagcccca agcctgagag 2220
gctggagccc atggctagtg gctcatcccc actgcattct cccctgaca cagagaaggg 2280
gccttggtat ttatatataa gaaatgaaga taatatataa aatgatggaa ggaagactgg 2340
gttgacggga ctgtggtctc tcctggggcc cgggacccgc ctggtctttc agccatgtct 2400
atgaccacac ccggtccagg ccagacacca cccccaccc cactgtcgtg gtggccccag 2460
atctctgtaa ttttatgtag agtttgagct gaagccccgt atatttaatt tattttgtta 2520
aacatgaaag tgcacccctt cctccaaaa aaaaaaaaa aaaaaaaaa 2569

<210> 770

<211> 1637

<212> DNA

<213> Homo sapiens

<400> 770

aaaagctgga gctccaccgc ggtggcgggc gctctagaac tagtgatcc cccgggctgc 60
aggaattcgg caccagaaac ctgcggaaaa tggtagcgat ggcggtggg ccgagtgggt 120
gtctgggtgc ggcgttttgg ctacggttgt tgttggcgac tgtgcttcaa gcgggtgtctg 180
cttttggggc agagttttca tcggaggcat gcagagagtt aggcttttct agcaacttgc 240
tttgacagctc ttgtgatctt ctcgacagct tcaacctgct tcagctggat cctgattgca 300
gaggatgctg tcaggaggaa gcacaatttg aaacaaaaaa gctgtatgca ggagctattc 360
ttgaagtttg tggatgaaaa ttgggaaggt tccctcaagt ccaagctttt gttaggagtg 420
ataaacccaa actgttcaga ggactgcaaa tcaagtatgt ccgtggttca gaccctgtat 480
taaagctttt ggacgacaat gggaacattg ctgaagaact gagcattctc aaatggaaca 540
cagacagtgt agaagaattc ctgagtgaag agttggaacg catataaatc ttgcttaaat 600
tttgccttat ccttttgtta ccttatcaaa tgaaatatta cagcacctag aaaataattt 660
agttttgtct gcttccattg atcagctctt tacttgaggc attaaatc taattaaatc 720

gtgaaatggc agtatagtcc atgatattcta aggagttggc aagcttaaca aaacccattt 780
tttataaatg tccatcctcc tgcatttgtt gataccacta acaaaatgct ttgtaacaga 840
cttgcggtta attatgcaaa tgatagtttg tgataattgg tccagtttta cgaacaacag 900
atttctaaat tagagaggtt aacaagacag atgattacta tgcctcatgt gctgtgtgct 960
ctttgaaagg aatgacagca gactacaaag caaataagat atactgagcc tcaacagatt 1020
gcctgctcct cagagtctct cctatttttg tattaccag ctttctttt aatacaaatg 1080
ttatttatag ttacaatga atgcaactgca taaaaacttt gtagcttcat tattgtaaaa 1140
catattcaag atcctacagt aagagtgaag cattcacaaa gatttgcgtt aatgaagact 1200
acacagaaaa cctttctagg gatttgtgtg gatcagatac atacttggca aatttttgag 1260
ttttacattc ttacagaaaa gtccatttaa aagtgatcat ttgtaagacc aaaatataaa 1320
taaaaagttt caaaaatcta tctgaatttg gaattcttct ggtttgttct ttcattgtta 1380
aaaatgatgt ttttcaatgc atttttttca tgtaagccct ttttttagcc aaaatgtaaa 1440
aatggctgta atatttaaaa cttataacat cttattgttg gtaatagtgc tttatatttg 1500
tctgatttta tttttcaaag ttttttcatt tatgaacaca ttttcattgg tatattattt 1560
aaggaatatc tcttgatata gaatttttat attaaaaatg atttttcttt gcttaaaaaa 1620
aaaaaaaaa aactcga 1637

<210> 771

<211> 2485

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2479)

<223> n equals a,t,g, or c

<400> 771

gatttacaca gcatcatgta ttgaatattg atttctcctt tttcatagca ttgaaaagg 60
gattatatat gtgttggtct agttctgtgc tattttttt ccactggcct gtttgtctat 120
cctttgttta ctaccaccaa gctataactc ttgatagctg gtaatgaagt cttccaattt 180
tggtcaccct caagattgtc ttctggcttt tctgatttcc aaataaattg taaaattgat 240
ttgccatttt tcacacacac accccttgct ggtttcttga ttgggattgc attaagtctt 300
ttgatgattt gagaattgac atccttacag tattgagtat tctaacctgt gaatatggta 360
gaaaccattg tgtattcagt tatttgattt ctttcagtta tgttttataa ttttctgtgt 420
agaggctctg tatatgtttc attagattta ttctttggta tttgtttttt gatactatta 480
taaatggtat tgttttaaat ttttattttc taattatagc aacttgtagt tagagtcatt 540
tgccacttta tgatggggat atgagaaatg cattgttagg cagtttcac atgcaaacat 600
catagagtgt acttacgcaa atcatgcaa catcatagag tgtacttaca caaacctaaa 660
tggtacatgc tgctacacac cttagctgta tgatatagcc agttgctcct agactgcaaa 720
cctatacagc atgttactct actgaatacc gtaagcagtt gtgacacaat gatgagtatt 780
tggttatcta aacatatcta agcattttta aaatgtacag taaaaatgta aaaagtataa 840
catggtacac ctgttttagg cacttaccgt gaatggagct tgcaagacta gaagttgctc 900
tggaagaatc agtgaatgag tgaatkctta ggacatcact atacactact gtagacttta 960
taaacactgc acacttaggc tacactaaat ttatttttaa aataaagtaa ttgcaatatg 1020
atgttatgac agctatgatg ccactaggca gcagaaatc ctgagctcca ttataatctt 1080
ataagaccac cgttgtatat gtgatccttc gttatgtggg acatgactcg atataaaatg 1140
gattgttata ttgacctttt atctgatgac ttaactaaat ttacttatta attttactag 1200
ttatctatag tctcattttt cctgtgtaca caattaattt atttgtaaa actaaatgtt 1260
tccttttttc attactcata ttttttttct ttgccttact acactgccta gtaaaatata 1320
taaaatatgt gcttcacgga aaggggactt tgattaagga catgcctcct tcagagcttt 1380

```
ttcttttccc cctagtattt ccaacttggg gatgtttggc atcgacgaat ttactgcagt 1440
gattaaccct cctcaggcct gcattttggc ggttgggagg ttccgacctg tgctgaagct 1500
cactgaggat gaagagggaa atgccaaact gcagcagcgc cagctcataa cagtcacaat 1560
gtcaagtgac agtcgagtgg ttgatgacga actggcaacc aggtttctta aaagttttaa 1620
agcaaaccta gagaatccta tccgacttgc ctagtctca aagataagaa gttggtgttc 1680
agcttagttg attcagtagt tgttaccaag aaacatatgt tataggaaaa caacttggta 1740
tttaagtatg aagtggatga aatgtttatt tatttaagggt gaaagcattt gaccaggggt 1800
gtcttcatct tcaatttggg tttaatgtta tagaaataaa tgatgataaa ctctaactaa 1860
taaaggaaaag agaatatattg gttactcaga tccattttta acctctgggt ctgtataaag 1920
ggaatattaa actagatgta aatcaaagta tatgtttggc tcatttgagc attttggaat 1980
atttgagaat gtatgataca tgtaaaatta aaaaaactat tagaactgta ccataattat 2040
gttgaaggta gaagtgatct tcaaagagat ggccattaac ttagcagtgg gacctcactt 2100
ttacaagcac tgctctagat atacttgaag aatttaatak gtacagaagt ttattctgga 2160
taataaataa ataaggatca cactgtatta ggggttatgg caacattatt gaatttttta 2220
tgtacataaa gccatatgtt taggggtggt tctatctgtc ttgtttttca cttatataac 2280
actgtgaact tctaaagmaa gaggataaaa gaagcatgaa tgaaaagaat gacatttcaa 2340
aaaaatggtt caatgaaaaa ctatagctaa aatatgtaaa ctttcttagg taaaccgctt 2400
gccttcatct tgagtcggaa tatatttaaa taaattgtgt tatctcttgc caaaaaaaaa 2460
aaaaaaaaaa aaaaaaang ggggg                                     2485
```

<210> 772

<211> 432

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (378)

<223> n equals a,t,g, or c

<400> 772

```
gggataaagg gtccatggac agaaagctgc ttgggaggac ccagtggaaat gggtcyggga 60
cacacttccc tggccatcag ccaacaagac caatcaaagc tgtaccacct gccccaccc 120
accgtgggcc ctcacagcat tgcctcacct cccgaggata ggacagtcaa agacagcacc 180
ccaagtcttc tggactcaga tcctctgatg gccatgctgc tgaaacttca agaagctgcc 240
aactacattg agtctccaga tcgagaaacc atcctggacc ccaaccttca ggcaacactt 300
taagggttcg gcaatcactg tcacccccgg acagcagaac gcttggcatc agcttatctt 360
tagctcctcc ttcttcnct tctccttctt ttcaagagca cttggctctt ccagccccaa 420
ggaggaagaa ca                                     432
```

<210> 773

<211> 1048

<212> DNA

<213> Homo sapiens

<400> 773

```
gaaaaaatta aaaagaaaaa ttgttttgaa aatgtacaga tcaagtccaa tattttgatt 60
atccacctgc atgtttttatt aaatatattg ataatgtgga tgtttacact ttgcatgata 120
ttagcagagt accactagta atgcacaaac atgtacaata tggtcattca taaccgattt 180
ttatagaata ctttttacat gtgcaactcc atccgttatg taaggattac atgaatattg 240
cacattccct tctggtttca caaacccatt tatacatatt tcttagtgag gctcattgta 300
```


catgtattga agctagaatc gagtcaagaa aaataaagcc ccattctcca actgcaaaat 360
gtgctttccc ataatgaaca ctagtccacca gcacagaata atctccaaca ttttctaaat 420
tctaattgcc aactgtttct atttatattt gatttatatt tcatttggag tctgttacat 480
ggcagcttag gcagactaga tcttggtttt tcccaatgca gcataatgag tatgatctat 540
ttcttttcaa ataatctttg agatcccagg aaaaaaaaaa tgctctgctc cattgagcta 600
taatgtaaat gtggttggtt aaaaaacagg tgaggcaagt gagtgattta ttgttcctga 660
ggaagtatat ctgatttttt ttctcatact ccaaaagcta gtccctactc tttaataaaa 720
ataatgggta actttttggt ttctactagc gaacttccat gacatttcct ttctatgtag 780
tgtgattaat gcaatacata ttatagttat ctatacacag tgtaagattt aacaaactga 840
aatgatccac ctcatatgtg agtccgtcca aaagatgtta ctgctctggg tgggccagtg 900
ttctatatcg gttatactaa ctttcattta aagtatttat tctaaaatgc ctctgagaaa 960
cagtaaaaaa taaaaacaac aagttgtcta aaatgcaaca gcttttatag taaatgtaca 1020
tttataaata aaatactcaa atcaaaaa 1048

<210> 774

<211> 1019

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (971)

<223> n equals a,t,g, or c

<400> 774

ggcacgasca cctttccagg gccgccaat aactccagta tacacgggtg ctccaaacgt 60
tcagagaatt cctactgccg ggatctacgg ggccagttac gtgccatttg ctgctccagc 120
tacagccacg atcgscacac tacagaagaa cgcggcagcc gcggccgccg tgtatggagg 180
atacgcaggc tacatacctc aggccttccc tgctgctgcc attcagggtc ccatccccga 240
cgtctaccag acatactgag gctggtgacc agcacgaaga cagaccacac aaacaccact 300
gaaggaacgc ttgactattt atgaagaagg aacatggttg attcacacat gcaacctgaa 360
agtgaagaat gttagcagat ttatttctga attattttat atacatgaag ttttacttag 420
ttttttaaga ctattttcaa cttagcatgc ctacgttcat acatttccaa aagacttgca 480
atgggttcgtg ccttcattcc atcttttaaa aatttgtagt ctgtactaca tttgtataga 540
ggtttttggt gttgtttttt taaggatata ttttcagtat gaagggtatt ttcttaactt 600
ctgcaactcca gagatttcta tttttagta ccttcaataa tatatcaact atatattaaa 660
aaagcacact tgaggagcta gggaactatt ttgaaaaata tatacaatat ttaaagatac 720
aaacagtagt gcttaaaawt actacataaa gcattatttt aaagggtata ctggaaagtg 780
cawttttaaa atgrgtaaaa ccycgtgtatt tcygctggca ttaagggtkg atgggtgttac 840
catgtatcat catggcggta ctatttttta aaagaaatta aacactggat ctctccttaa 900
gccaaacattg aaaagacttg ccgcacttct gagtccaaac actggaaagc tctcctttgc 960
caccgttagg nggggtcat tctccatgtg ccttagcctt aaacatgccc ccactccgc 1019

<210> 775

<211> 2248

<212> DNA

<213> Homo sapiens

<400> 775

gggcccggcg cgtaggaagg cacggccggc ggcgccggag cgcagcgatg gccgggagag 60
ggggcagcgc gctgctggct ctgtgcgggg cactggctgc ctgcgggttg ctccctggcg 120

```

ccgaakccca kgakcccggg gcgcccgcgg cgggcatgag gcggcgccgg cggctgcagc 180
aagaggacgg catctccttc gagtaccacc gctaccccca gctgcgcgag gcgctcgtgt 240
ccgtgtggct gcagtgcacc gccatcagca ggattttacac ggtggggcgc agcttcgagg 300
gccgggagct cctgggtcatc gagctgtccg acaaccctgg cgtccatgag cctgggtgagc 360
ctgaatttaa atacattggg aatatgcatg ggaatgaggc tgttgagcga gaactgctca 420
ttttcttggc ccagtaccta tgcaacgaat accagaaggg gaacgagaca attgtcaacc 480
tgatccacag taccgcgatt cacatcatgc cttccctgaa ccagatggc tttgagaagg 540
cagcgtctca gcctggtgaa ctcaaggact ggtttgtggg tcgaagcaat gcccagggaa 600
tagatctgaa ccggaacttt ccagacctgg ataggatagt gtacgtgaat gagaaagaag 660
gtggtccaaa taatcatctg ttgaaaaata tgaagaaaat tgtggatcaa aacacaaagc 720
ttgctcctga gaccaaggct gtcattcatt ggattatgga tattcctttt gtgctttctg 780
ccaatctcca tggaggagac cttgtggcca attatccata tgatgagacg cggagtggta 840
gtgctcacga atacagctcc tccccagatg acgccatttt ccaaagcttg gcccgggcat 900
actcttcttt caaccgggcc atgtctgacc ccaatcggcc accatgtcgc aagaatgatg 960
atgacagcag cttttagatg ggaaccacca acggtggtgc ttggtacagc gtacctggag 1020
ggatgcaaga cttcaattac cttagcagca actgttttga gatcaccgtg gagcttagct 1080
gtgagaagtt ccacctgaa gagactctga agacctactg ggaggataac aaaaactccc 1140
tcattagcta ccttgagcag atacaccgag gagttaaagg atttgtccga gacctcaa 1200
gtaacccaat tgcgaatgcc accatctccg tggaaggaat agaccacgat gttacatccg 1260
caaaggatgg tgattactgg agattgctta tacttgaaa ctataaactt acagcctcag 1320
ctccaggcta tctggcaata acaaagaaag tggcagttcc ttacagccct gctgctggg 1380
ttgattttga actggagtca ttttctgaaa ggaaagaaga ggagaaggaa gaattgatgg 1440
aatggtggaa aatgatgtca gaaactttta atttttaaaa aggccttctag ttagctgctt 1500
taaactctatc tatataatgt agtatgatgt aatgtggtct tttttttaga ttttgtgcag 1560
ttaatactta acattgattt attttttaat catttaaata ttaatcaact ttccttaaaa 1620
taaatagcct cttaggtaaa aatataagaa cttgatatat ttcattctct tatatagtat 1680
tcattttcct acctatatta cacaaaaaag tatagaaaag atttaagtaa ttttgccatc 1740
ctaggcttaa atgcaatatt cctggtatta tttacaatgc agaatttttt gagtaattct 1800
agctttcaaa aattagttaa gttcttttac tgtaattggt gacaatgtca cataatgaat 1860
gctattgaaa aggttaacag atacagctcg gagtgtgtag cactctactg caagacttaa 1920
atagttcagt ataaattgtc gtttttttct tgtgctgact aactataagc atgatcttgt 1980
taatgcattt ttgatgggaa gaaaaggtag atgtttacaa agagggttta tgaaaagaat 2040
aaaaattgac ttcttgcttg tacatatagg agcaatacta ttatattatg tagtccgtta 2100
acactactta aaagtttagg gttttctctt ggtttagtag tggccagaa ttgcattctg 2160
aatgaataaa ggtaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2220
aaaaaaaaaa aaaaaaaaaa aactcgag 2248

```

<210> 776

<211> 1605

<212> DNA

<213> Homo sapiens

<400> 776

```

aaggaaagtca catggaagag gggcggtagt tggttgtggg cactgggtta gaggtatcac 60
gtgggggcac tttcgtctta gcttttgagc aagacgcagg cgcaaccac ggctgctgcg 120
gggatccttg tggcccttcc ggtcgrtgga accaatccgt gcacagagaa gcggggcgaa 180
ctgaggcgag tgaaagtggac tctgagggct accgctaccg ccactgctgc ggcagggcg 240
tggaggcgag agggccgcgg agggccgagt tgcaaacatg gctcagagca gagacggcgg 300
aaaccgcttc gccgagccca gcgagcttga caaccctttt caggaccag ctgtgatcca 360
gcaccgaccc agccggcagt atgccacgct tgacgtctac aacccttttg agaccgggga 420
gccaccacca gcctatgagc ctccagcccc tgccccattg cctccaccct cagctccctc 480

```

cttgagcccc tcgagaaaagc tcagccccac agaacctaag aactatggct catacagcac 540
tcaggcctca gctgcagcag ccacagctga gctgctgaag aaacaggagg agctcaaccg 600
gaaggcagag gagttggacc gaaggagcga gagctgcagc atgctgccct gggaggcaca 660
gctattcagc cctgcttttt ccaggacatc tccatggaga tcccccaaga atttcagaag 720
actgtatcca ccatgtacta cctctggatg tgcagcacgc tggctcttct cctgaacttc 780
ctcgccctgc tggccagctt ctgtgtggaa accaacaatg gcgcaggctt tgggctttct 840
atcctctggg tcctcctttt cactccctgc tcctttgtct gctggtagcg ccccatgtat 900
aaggctttcc ggagtgcagc ttcatccaat ttcttcgtt tcttcttcat tttcttcgtc 960
caggatgtgc tctttgtcct ccaggccatt ggtatcccag gttggggatt cagtggctgg 1020
atctctgtc tgggtgggccc gaaggcaaca cagcagatc cgtgctcatg ctgctggctg 1080
ccctgctctt cactggcatt gctgtgctag gaattgtcat gctgaaacgg atccactcct 1140
tataccgccg cacagggtgc agctttcaga aggccagca agaatttgct gctgggtgtct 1200
tctccaaccc tgcggtgcga accgcagctg ccaatgcagc cgtggggct gctgaaaatg 1260
ccttccgggc cccgtgaccc ctgactggga tgccctggcc ctgctacttg agggagctga 1320
cttagctccc gtccctaagg tctctgggac ttggagagac atcactaact gatggctcct 1380
ccgtagtgtc cccaatccta tggccatgac tgctgaacct gacaggcgtg tggggagtgc 1440
actgtgacct agtcccccca tcaggccaca ctgctgccac ctctcacacg ccccaaccca 1500
gcttccctct gctgtgccac ggctgtgtgt tcggttattt aaataaaaaa aaagtggaac 1560
tggaactgaa aaaaaaaaaa aaaaaaaaaa aaaaagggsg gccgc 1605

<210> 777

<211> 1808

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1457)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1806)

<223> n equals a,t,g, or c

<400> 777

gaagaccggt ccggaattcc cgggtcacca cgmgtccacc agcacagcaa acccgccggg 60
atcaaagtgt accagtcggc agcatggcta cgaaatgtgg gaattgtgga cccggctact 120
ccaccctct ggaggccatg aaaggaccca gggaagagat cgtctacctg ccctgcattt 180
accgaaacac aggcactgag gccccagatt atctggccac tgtggatgtt gacccaagt 240
ctccccagta ttgccaggtc atccaccggc tgcccatgcc caacctgaag gacgagctgc 300
atcactcagg atggaacacc tgcagcagct gcttcggtga tagcaccaag tcgcgacca 360
agctggtgct gccagctctc atctcctctc gcacttatgt ggtggacgtg ggctctgagc 420
ccggggcccc aaagctgcac aaggctcatt agcccaagga catccatgcc aagtgcgaac 480
tggcctttct ccacaccagc cactgcctgg ccagcgggga agtgatgatc agctccctgg 540
gagacgtcaa gggcaatggc aaagggggtt ttgtgtgct ggatggggag acgttcgagg 600
tgaaggggac atgggagaga cctgggggtg ctgcaccgtt gggctatgac ttctgtgacc 660
agcctcgaca caatgtcatg atcagcactg agtgggcagc tcccaatgtc ttacgagatg 720
gcttcaaccc cgctgatgtg gaggtggac tgtacgggag ccacttatat gtatgggact 780
ggcagcgcca tgagattgtg cagaccctgt ctctaaaaa tgggcttatt cccttgagga 840
tccgcttcct gcacaaccca gacgtgccc aaggctttgt gggctgcgca ctcagctcca 900

ccatccagcg cttctacaag aacgagggag gtacatggtc agtggagaag gtgatccagg 960
tgccccccaa gaaagtgaag ggctggctgc tgccccgaaat gccaggcctg atcaccgaca 1020
tcctgctctc cctggacgac cgcttcctct acttcagcaa ctggctgcat ggggacctga 1080
ggcagtatga catctctgac ccacagagac cccgcctcac aggacagctc ttcctcggag 1140
gcagcattgt taagggaggc cctgtgcaag tgctggagga cgaggaacta aagtcccagc 1200
cagagccccct agtgggtcaag ggaaaacggg tggctggagg ccctcagatg atccagctca 1260
gcctggatgg gaagcgctc tacatcacca cgctcgtgta cagtgcctgg gacaagcagt 1320
tttaccctga tctcatcagg gaaggctctg tgatgctgca ggttgatgta gacacagtaa 1380
aaggagggct gaagttgaac cccaacttcc tggaggactt cggaaggag ccccttgccc 1440
cagcccttgc ccatganstc cgctaccctg gggcgattg tagctctgac atctggattt 1500
gaactccacc ctcatcacc acactcccta ttttggggcc tcaactcctt ggggacctgg 1560
cttcattctg ctctctcttg gcacccgacc cttggcagca tgtaccacac agccaagctg 1620
agactgtggc aatgtgttga gtcataatac tttactgacc actgttgctt gttgctcact 1680
gtgctgcttt tccatgagct cttggaggca ccaagaaata aactcgtaac cctgtccttc 1740
aaaaaaaaaa aaaaaaaaaa aaaaaagggg ggcgtcttaa aagatcctcc aagggccaaag 1800
cttacnct 1808

<210> 778

<211> 1484

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1405)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1479)

<223> n equals a,t,g, or c

<400> 778

ccgcggcgaa cgggaagtga gcaggcgcgc gggctcggcg cgcgcaggcg cgactagggg 60
gcagcgccag gtccgggtgtt ggggtgtccg agttgccgcc ggagaggagt ggcctcgccc 120
gcttgagttt tgattcatca tggataatct gtcacagaa gaaattcaac agagagctca 180
ccagattact gatgagtctc tggaaagtac gaggagaatc ctgggttttag ccattgagtc 240
tcaggatgca ggaatcaaga ccatcactat gctggatgaa caaaaggaa aactaaaccg 300
catagaagaa ggcttggacc aaataaataa ggacatgaga gagacagaga agactttaac 360
agaactcaac aaatgctgtg gcctttgtgt ctgcccattg aatagaacaa agaactttga 420
gtctggcaag gcttataaga caacatgggg agatgggtga gaaaactcac cttgcaatgt 480
agtatctaaa cagccaggcc cggtgacaaa tggtcagctt cagcaaccaa caacrggagc 540
agccagtggt ggatacatc aacgcataac taatgatgcc agagaagatg aaatggaaga 600
gaacctgact caagtgggca gtatcctggg aaatctaaaa gacatggccc tgaacatagg 660
caatgagatt gatgctcaa atccacaaat aaaacgaatc acagacaagg ctgacaccaa 720
cagagatcgt attgatattg ccaatgccag agcaaagaaa ctcatcgaca gctaaagcta 780
ctgctgttct tctttatcat ttattcactt ccgtagctcc tcttgaaaag ttattacctt 840
ttcagagttt aagttttcgg ttccacgctc ttctaattgg gagataatat ggaagaaggg 900
ccagagcagt tacagccctc cttctttttt gttttctgtt gagggccgac tgctgctctg 960
ccttccttct agtattttct ttctcaattc atacgcttag attggttttc atatgtcatg 1020
tttagtggtt tcactctcct catatacttc agcaggttct ttgctttca agatttgga 1080

gcattgccaa agacagccat gaagaaggaa gctgtagagg tgttttttgt tgttgtttat 1140
ttttgctttt gtggttgagg gaaggacaag agataagagg ttgttacctc agtaaaaacc 1200
ttcaggccac aaagcaaaaa gttgcatagc cacaacgaag atctagttgg atatagtttt 1260
tgatttaagt tgcagttata gccaatntag gctaattgctt ggtttttgagg cttttataca 1320
caacgttttt gtttaggcac acagttttgc aacctctgct ccaaagrgaa aaatagratg 1380
agttttcttt cttttttttt ttttngggag tcagagtctc gctcycytgk ccmrggctgg 1440
gagtgccawa gcgcgatctg gggctccact gccaacctnc cgcc 1484

<210> 779

<211> 1343

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1313)

<223> n equals a,t,g, or c

<400> 779

ttaaataaac agatgctctc acctgggaag aggagacagg gaggggaacc aattgaagaa 60
agaggagaaa agtcttagag tgtggaaaag gcaaccagggt tggccgtaag gtgcctgctg 120
gaatgctgtg gcctccacac gggctctgggc atccggactg ataaccagcc ggccagactg 180
agggatggaa ggcactgaga tggggggccg tccaggcgga caccgcgaga aatggagctt 240
tctgtggtct cttgcactct ggcctgcctct tgcctctctct gtgtctctct tctctggtct 300
ctccctctct cctcctcagc ctggtctttc tctttggtgc acacttagtt attgttgtga 360
gcaatggaaag ttcaaaggaa ctccctctcc agctcttctg aatcttgga cacagcctaa 420
aaaggacaaa aagttagaag acagcatagc aactcagctc agggagctac cagagaaaaa 480
tagcaactga tgtgggtgct tttttttttt ttttaatttg aataaaaaga attagaagtg 540
atgtcctttt ataaaatgcc ttctccccct tccgcctac agtctcttcc tctcccccta 600
gaggggggaa agtgtataaa cctacagggt tgtgagtctg aaaagaggat cccctcacc 660
cccaccctgg gcagagcagt ggggggtggg ggggtgggaga gggggacaca gatcctggca 720
cactgtggat atttcttgca gattgcagtc tcttggtggc caaacagggt aggtagacta 780
tcgcctctgg caggtgccac cttttgttac caacatgttc tgaggtgtta ggatttgggt 840
tgggtttttt ttgtttgtt tttttttcct tttggtctt tttttttct ctttttaaag 900
aaaagctaaa ggccgctgtg agtcctggtg gcaggctctc catggatgta gcataatcgaa 960
gataattttt atactgcatt tttatggatt attttgaat gtgtgattcc gtctgctgag 1020
gaggtgggag gggctccagg gaaagccacc caccttcagt gaggttgctc cccagctgag 1080
cgcaccgggc atgggatgtg gaggtggcg acacaccctg tgctctcca aggtggggc 1140
cgtggggcgt ccagagtctc tctgggtctc agatgtccat ctgccacctc ttgttaaggc 1200
tctagccaga agggagggtg agggtagaag aaagtatttc ccgaagaaaa aaagaatgaa 1260
aagtcattgt actgaactgt ttttatattt ttaaaagtta ctatttaaag gtnaaaaaaa 1320
aagggggggc ccgtaccca att 1343

<210> 780

<211> 453

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (170)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (225)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (258)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (282)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (287)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (291)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (297)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (299)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (307)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (339)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (340)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (341)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (342)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (361)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (362)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (364)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (365)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (366)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (378)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (381)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (382)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (389)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (390)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (394)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (395)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (398)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (406)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (417)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (420)
<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (421)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (425)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (428)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (430)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (431)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (432)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (433)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (443)
<223> n equals a,t,g, or c

<400> 780
aattcggcac gagaggctag gcacagtggc tcacacctgt aatccttgca ttttgggaagg 60
ctgaggcagg aggatcactt taggcctggg gtgttcaaga ccagcctggg caacatagtg 120
agacactgtc tctacaaaaa aaaggaagga agggacacat atcaaactgn aacaaaatta 180
gaaatgtaat tatgttctaa gtgcctccaa gttcaaaact tattngaagtg ttgagagttt 240
ggttacggaa ttcggttngg ggggccaaaag ggttgtttta gntttttaat nccggtntnt 300
ttcgggnaac ccttggggaat ttttggggct ccttgtagnn nncccccttt nggagggggg 360
nntnnntttg ttttnccncc nngggggggn tttnttngg ggggancttt ttttncnccn 420
ngttnggntn nnnggttttt ttngggtttt ttt 453

<210> 781
<211> 498

<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (120)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (421)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (428)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (430)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (459)
<223> n equals a,t,g, or c

<400> 781
aattcggcac gaggtgctna tagtcccact acttgtgggg ctaaggcagg aggatcactt 60
gagccccgga ggtcgaggct acagtgagcc aagagtgcac tactgtactc cagccagggn 120
aagagagcga gaccctgtct caataaataa ataaataaat aaataaataa ataaataaaa 180
acaaaagttga ttaagaaagg aagtataggc caggcacagt ggctcacacc tgtaatcctt 240
gcattttgga aggctgaggc aggaggatca cttaggcct ggtgtgttca agaccagcct 300
ggtcaacata gtgaggacac tgtctcttac caaaaaaagg aggggaaggga cacatttcaa 360
atgaaacaaa ttagaatggt atttatgttc taagtgcctc cagttcaaaa ttttttgat 420
ntttgagntn tggttacgga atacgtagg gggccaaang gatttgtaag tctttaatgc 480
cgttttttca gaaaccta 498

<210> 782
<211> 541
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature

<222> (29)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (319)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (333)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (350)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (371)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (372)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (390)
<223> n equals a,t,g; or c

<220>
<221> misc feature
<222> (396)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (431)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (443)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (452)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (460)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (492)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (499)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (539)

<223> n equals a,t,g, or c

<400> 782

```
acacctaaat gtttttattt ttgagaagng gggacagagt ctactatgt caccaggt 60
ggagtgcaat ggcattgatc cagctcactg caaccttcgc ctctgggtt caagcgattc 120
tcctgcctcc gcctcctgag tagctgggat tataggcaca caccaccacg cccagctaat 180
tttttgattt tttagtagag acagagtttc accatgttg ccaggctgg cttggaactc 240
ctggaccttg tggatccacc cacctcgcc tccagagtg ctggggatta cagggcattga 300
gccaccacgg cttgggctna aggaacacct aanttttatg tttctgggn tcaaaaacca 360
gtttccattc nnangttgtc ctcaacagan gggtantgg ggtggagaca gcaggggagg 420
gagggagag ngtgggttg aantggttca antcaggcan taagcgattt tagctttaat 480
ttaagtcct cngtcagnt ttaagcactt ggtaagacag ggctggaagt agcttttcna 540
a
```

<210> 783

<211> 586

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (28)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (150)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (199)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (352)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (359)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (426)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (435)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (441)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (458)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (468)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (482)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (485)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (490)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (554)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (569)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (577)

<223> n equals a,t,g, or c

<400> 783

gggtcgaccc acgcgtccgc gatgncgngn canacttccg gtgtgggtga cgagtgggtgg 60
ccgaagcagg gggacagcaa gggacgctca ggcgggcgac catggcggac ggcggctcgg 120
agcgggctga cgggcgcacg gtcaagatgn aggtggacta cagcgccacg gtggatcagc 180

```

gcctacccga gtgtgcgant agccaaggaa ggaagacttc aagaagtcac tgaaaccctt 240
ctctctctgg aaaagcagac tcgtactgct tccgatatgg tatcgacatc ccgtatctta 300
gttgccagta gtggaagatg tgctaatan ggctaaaaga atgggattta anttaatgna 360
aatgatttat gcntttgtcc caaaaggcgg attcagttta aaacaagctg ttgccccaaa 420
tggttncaac atggncgtac nttatgtttg aaggaaantc acagaacntt cccatccaaa 480
cnttngattn aattgataat cccacgaatg ggtttaccga ggccaagatt ttatgttgga 540
aatggagcgt gcgnactgga tcaaaacctt agccacnatt aaagga 586

```

<210> 784

<211> 226

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (208)

<223> n equals a,t,g, or c

<400> 784

```

ggccggggac ggtgtgagan cggttaagatg gcggcgggcg cggtggtgga gttccagaga 60
gcccagtctc tactcagcac cgaccgggag gcctccatcg acatccctcca ctccatcgtg 120
aagcgtgaca ttcaggaaaa cgatgaagag gcagtgcgaag tcaaagagca gagcatcctg 180
gaactgggat ctctcctggc aaagactnga caagctgcag agctta 226

```

<210> 785

<211> 356

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (176)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (180)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (251)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (254)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (303)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (341)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (348)
<223> n equals a,t,g, or c

<400> 785
ccgggntccc gccaccaccg cgcgcgggac agattgattc actttggagc tgtaagtact 60
gatgtattag ggtgcagcgc tcattgttcc ttgacgcaga gtcccaaaat gaatatccaa 120
gagcagggtt tccccttgga cctcggagca agtttcaccg aagatgctcc cccgancccn 180
agtgcctggt gaggagggag aactggtgtc cacagaccgc agggccgcca gctacagttt 240
ctgctccggg naangtggtg gcattaaagg tgagacttcg acggccactc cgaagcgctc 300
ggntctngac ctgggggtatg agcctgaggn agtgcttccc naaccancca taattt 356

<210> 786
<211> 512
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (179)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (267)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (308)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (318)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (338)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (348)
<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (349)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (354)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (385)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (420)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (458)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (469)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (486)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (508)
<223> n equals a,t,g, or c

<400> 786
ggcagagcct gacggcagcc acccggtggt gntggcgccc tacaacggcg ggccggcngg 60
cacgtgcccc aagatcaagc aggaggcggc ctcttcgtgc acccacttgg gcgctggacc 120
ccctctgcag caatggccac cggcgggctg ccacacggac ttccccctgg ggacggcant 180
tccccagcag gacttacccc ggaccctggg tcttgaggga agtgctgagc agcaggggac 240
tgttcaccct gccctgccgg ttctcctnccg ggtttccatc cccacccggg ggcccaattt 300
accatnnct ttccctngnc ccattcagat gcagccgnaa gttnccgnc gttncattaa 360
ccaaggggtt tatgccaacc ggttnctgga tgccaaagga ggcccaagtc aaaggggggn 420
aaggagggtt tgggcccccg aaaaggaccg gcaaccanat tttgattang gggtttggga 480
aaaacnttca aaaaagggtt tttcccantt tt 512

<210> 787

<211> 339
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (248)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (292)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (294)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c

<400> 787
gctgcgcgcc cgcggagcgg cctgggcccgg cggcctcctg catcggggcgg cccctgcag 60
cctcctgcc aggcctccga catggacatc ttccagcaac agatctcgag aagacagctg 120
gctaaaaatcc ttatttgctc ggaaagtga tccaagaaaa gatgccact ccaatctcct 180
atccaaaaag gaaacaagca atctatacaa attacagttt cacaatgtta aaccggaatg 240
cctagaanca tacaacaaaa ttgtcaaga ggtgttgcca aagattcacg annnataaac 300
actacccttg tactttggtt gggggacttg gnaacacgt 339

<210> 788
<211> 405
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (355)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (386)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (388)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (397)
<223> n equals a,t,g, or c

<400> 788
gcggcagcct tttcccgcg c gtgctgcctt cgccgctcgg gccgcccggg ggaaaacatg 60
gcgtctgccc tggagcagtt cgtgaacagt gtccgacagc tctcagctca aggtttgtga 120
agttttctat gcccagtggt cctgacttcg aaacgctatt ctcacaggtt cagctcttca 180
tcagcacttg taatggggag cacattcgat atgcaacaga cacttttgct gggctttgcc 240
atcagctaac aaatgcactt gtggaaagaa aacagcccct gcgaggaatt ggcacacctta 300
agcaagccat agacaagatg cagatgaata caaaccagct gacctcaata catgntgatc 360
tctgccagct tgtttgctag caaaangnct tnagctngcc cttca 405

<210> 789
<211> 518
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (380)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (413)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (450)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (461)
<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (479)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (501)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (515)
<223> n equals a,t,g, or c

<400> 789
tgcgccaaagc tctaatacga ctactatag ggaaagctgg tacgcctgca ggtaccgggc 60
cggaattcc cggtcgacc cagcgctcg cttcctgccg tcgcgtttgc acctcgctgc 120
tccacctctg gggcgcttc caaccttcca gcctgcgacc tgcggagaaa aaaaattact 180
tattttcttg ccccatatcat accttgaggc gagcaaaaaa attaaatttt aacctgagg 240
gaaatcgtgc acatccaggc tggtcagtgt ggcaaccaga tcggtgccaa gttctgggag 300
gtgatcagt atgaacatgg gcatcgacc caccgggcac ctaccacggg ggacagcgac 360
ctgccagctg ggaccgcatn ttctgtgtac tgacaatgga agccacaggt ggnaaatgat 420
gtttcctcgt ggccatcctg gtgggatctn agaacctggg nacctggaa tctggttng 480
ttcagggtccc ttttgggcca ntgttttaga ccagngaa 518

<210> 790
<211> 386
<212> DNA
<213> Homo sapiens

<400> 790
cgcgaatcgc agcttctgag accaggggtg ctccgtccgt gctccgcctc gccatgactt 60
cctacagcta tcgccagtcg tcggccacgt cgctcctcgg aggcctgggc ggcggtccg 120
tgcgttttgg gccgggggtc gcttttcgcg cgcccagcat tcacgggggc tccggcggcc 180
gcggcgatc cgtgtcctcc gcccgcttg tgctcctcgc ctctcgggg ggctacggcg 240
gcggctacgg cggcgctcctg accgcgtccg acgggctgct ggcgggcaac gagaagctaa 300
ccatgcagaa cctcaacgac cgctggcct cctacctgga caaggtgcgc gccctggaag 360
cggccaacgg cgagctagag gtgaaa 386

<210> 791
<211> 470
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (112)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (324)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (402)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (428)
<223> n equals a,t,g, or c

<400> 791
tcgacccacg cgtccgccca cgcgtccgag tggctctgagg aacagctgat tgctgcaaaa 60
ttttgctttg ctggacttct tataggccag actgaagtgg atatcatgag tnatgctaca 120
caggctatat ttgaaatact ggagaaatcc tggttgcccc agaattgtac actggttgat 180
atgaagattg aatttggtgt tgatgtaacc accaaagaaa ttgttcttgc tgatgttatt 240
gacaatgatt cctggagact ctggccatca ggagatcgaa gccaacagaa agacaaacag 300
tcttatcggg acctcaaaga agtnactcct gaagggtcc aaatggtaaa gagaaacttt 360
gagtgggttg cagagagagt agagttgctt ttgaaatcag anagtcagtg cagggttgta 420
gtgttgangg gctctacttc tgatcttggg cactgtgaaa aaatccagga 470

<210> 792
<211> 428
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (204)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (207)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (228)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (233)